Supplementary File S4: Multiple sequence alignment of Phafin2 and Phafin2-like proteins from bacteria, archaea, fungi, plants, nonhuman mammals, and humans.

Bacteria

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sp|Q9H8W4|PKHF2_HUMAN            ----ARSDSYSQSLKSPLNDMSDDDDDDDSSD---------------------------   249
tr|A0A1Y6CWR2|A0A1Y6CWR2_9GAMM   LDP-AKAQLAQGLRNPVLGQGGHPQIQAKPS---------------------------   1181
tr|A0A4Q5XUS2|A0A4Q5XUS2_9DELT   ----------------------------------------------------------   383
tr|A0A0A8E4G1|A0A0A8E4G1_9GAMM   -----VKN-------------------------IYKGFC-------------------   114
tr|A0A2E9XWQ4|A0A2E9XWQ4_9RICK   VSF-APKPSTMQPRSARVE-TSSFDQDLKRA---LEMSLE------------------   271
tr|A0A0G2ZPZ8|A0A0G2ZPZ8_9DELT   ----------------------------------------------------------   347
tr|A0A5C6VDZ7|A0A5C6VDZ7_9BURK   ----------------------------------------------------------   269
tr|A0A2E9LIA3|A0A2E9LIA3_9CHLR   ----------------------------------------------------------   90
tr|A0A2E4CAT1|A0A2E4CAT1_9ACTN   TEP-LL----------VMGDGGWADIRDWRVLCCLNRGWK------------------   267
tr|A0A4Q6X9R2|A0A4Q6X9R2_9BURK   ----------------------------------------------------------   334
tr|A0A158KI31|A0A158KI31_9BURK   ----------------------------------------------------------   332
tr|A0A2W4SQ66|A0A2W4SQ66_9GAMM   ----------------------------------------------------------   329
tr|A0A5J6QPA5|A0A5J6QPA5_9PSED   ----------------------------------------------------------   309
tr|A0A561P8H2|A0A561P8H2_XANCT   ----------------------------------------------------------   290
tr|A0A2E8LZD9|A0A2E8LZD9_9BACT   IRI-LS----------LVG----LDPQDMCRLACLSRSWK------------------   111
tr|A0A4R7ALI0|A0A4R7ALI0_9GAMM   ----------------------------------------------------------   321
tr|A0A3L7RST6|A0A3L7RST6_9BACT   -------------------------QITLALCLSARTA--------------------   340
tr|A0A2E0WHK0|A0A2E0WHK0_9CHLR   LMF-LP---------------LPISELEVFLYVNKKWN--------------------   112
tr|A0A1Z9KZ67|A0A1Z9KZ67_9SYNE   LRP-APADAQIGTLSSPLA-GGHHPRHG------------------------------   131
tr|A0A2E9LIE3|A0A2E9LIE3_9CHLR   LRF------------------IPVKCWTSCFLVSRQFS-------------------   301
tr|A0A3S3EH81|A0A3S3EH81_9PSED   ----------------------------------------------------------   313
tr|A0A0F4XPH7|A0A0F4XPH7_9PSED   ----------------------------------------------------------   411
tr|A0A657PDX6|A0A657PDX6_9PSED   ----------------------------------------------------------   411
tr|G8Q597|G8Q597_PSEF3           ----------------------------------------------------------   411
tr|A0A2E0E560|A0A2E0E560_9RHOB   FAN-LP---------------IVIVDFYNLRLVCKKWC--------------------   149
tr|A0A0C2EFB1|A0A0C2EFB1_9PSED   ----------------------------------------------------------   412
tr|A0A2E6VXV8|A0A2E6VXV8_9PROT   -----K-------------------------NNFIF----------------------   128
tr|A0A2D7RET3|A0A2D7RET3_9GAMM   LCL-LP---------------LTIMEKHVFLYVNKSWN--------------------   107
tr|A0A4R7L8D8|A0A4R7L8D8_9GAMM   ----------------------------------------------------------   310
tr|A0A4R3YS80|A0A4R3YS80_9GAMM   ----------------------------------------------------------   288
tr|A0A4Q3E3P0|A0A4Q3E3P0_9RICK   IRQ-LF----------ENL----VPYDEMTA---HN---L-----------------   127
tr|A0A0Q9PCH9|A0A0Q9PCH9_9GAMM   ----------------------------------------------------------   262
tr|A0A2D5QHX0|A0A2D5QHX0_9GAMM   SMG-YPSDLVNEQIERGAGYKGSTPDEKVKA----VVEWF-----------------   223
tr|A0A239KKI8|A0A239KKI8_9PSED   ----------------------------------------------------------   1020
tr|A0A2E8CGN4|A0A2E8CGN4_9DELT   IRD-LK-----QRRSEIEGELQKN----------------------------------   590
tr|A0A6I1NH92|A0A6I1NH92_9PSED   ----------------------------------------------------------   1019
tr|A0A1E3GCQ5|A0A1E3GCQ5_9GAMM   ----------------------------------------------------------   312
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tr|A0A2A8BFD9|A0A2A8BFD9_9BACI     --M-DPADFVAMQLSGV--------------------------------------------    88
tr|A0A484ZT69|A0A484ZT69_9GAMM     ------------------------------------------------------------   146
tr|A0A2M7G853|A0A2M7G853_9BACT     NRIPIARDAVRT------G----RRRIEWREDQPASLFWVEAQDQGDPSHPSQIRDRLFD   371
tr|A0A2C5DIR4|A0A2C5DIR4_9BACI     --M-DPADFVAMQLSGV--------------------------------------------    88
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Archaea

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sp|Q9H8W4|PKHF2_HUMAN              --DDDSSD----------------------------------------------------   249
tr|A0A482RXE8|A0A482RXE8_9ARCH     ------------------------------------------------------------   468
tr|A0A482S4E7|A0A482S4E7_9ARCH     -VKDVSQELW---PYFPIALLLC---------T---------------------QD-L     149
tr|A0A482RTS6|A0A482RTS6_9ARCH     ----LGLDPA---PWALRRLATL---------P---------------------Y---     193
tr|A0A482UR88|A0A482UR88_9ARCH     ------------------------------------------------------------   110
tr|A0A482R0G1|A0A482R0G1_9EURY     ------------------------------------------------------------    93
tr|A0A482RYJ3|A0A482RYJ3_9ARCH     ------------------------------------------------------------   158
tr|A0A482SL25|A0A482SL25_9ARCH     ---GGFGAFW---ACI------------------------------IPNIAPQ--       280
tr|A0A482SVI4|A0A482SVI4_9ARCH     ----------SLGSAATTGSRSPVAGSIAA-------TTG-----------------     127
tr|A0A482ST03|A0A482ST03_9ARCH     ------------------------------------------------------------   153
tr|A0A482R4B7|A0A482R4B7_9EURY     --GAGGSEAW---PGTLGNVTDV---------P---------------------LA-P     290
tr|A0A482SVF7|A0A482SVF7_9ARCH     SEITSNHDEW---KQSIFNLVRE---------V----------------VSSVDPDVK     202
tr|A0A482SZF2|A0A482SZF2_9ARCH     ------------------------------------------------------------   465
tr|A0A482RGE2|A0A482RGE2_9ARCH     ------------------------------------------------------------   596
tr|A0A482RTU5|A0A482RTU5_9ARCH     SGGSLPLLQW---LLEVKRCSLM---------D-------------------RASG--     361
tr|A0A482SG35|A0A482SG35_9ARCH     V---------------DSVVTT------------------------------------     227
tr|A0A482RW94|A0A482RW94_9ARCH     ------------------------------------------------------------   169
tr|A0A482RV05|A0A482RV05_9ARCH     ------------------------------------------------------------   129
tr|A0A482RVR9|A0A482RVR9_9ARCH     P--------------FFVIEA------------------------------------      182
tr|A0A482SAN9|A0A482SAN9_9ARCH     -----------SLPVVLQEAVDSAVNNSIDS-------SEN-----------------     207
tr|A0A482RAR6|A0A482RAR6_9ARCH     -AEVEARIAW---GQAVNVVSGC---------EGIT--PLHAA-VSYFNAYLQRVASG-D   316
tr|A0A482UQL2|A0A482UQL2_9ARCH     PTLTSPLPPW---IEGLVYVRHT----------------------------------      251
tr|A0A482V091|A0A482V091_9ARCH     ------------------------------------------------------------   171
tr|A0A482S307|A0A482S307_9ARCH     ------------------------------------------------------------   158
tr|A0A482SRA1|A0A482SRA1_9ARCH     ----------NLPSSIQILVDCG------A-------DVN-----------------     276
tr|A0A482RXE5|A0A482RXE5_9ARCH     ------------------------------------------------------------    80
tr|A0A482SVG8|A0A482SVG8_9ARCH     -NRAHSGI-------------EY---------MQSELDESEVK-LNTANEEA--------   228
tr|A0A482UVH9|A0A482UVH9_9ARCH     ------------------------------------------------------------    82
tr|A0A482RQW7|A0A482RQW7_9ARCH     --GECPSRSL---IETIRYCSIY---------C-------------------I-----     138
tr|A0A3A5UT62|A0A3A5UT62_9EURY     ------------------------------------------------------------   279
tr|A0A482UPW1|A0A482UPW1_9ARCH     -----------------------------------PGESQK-IDRITDAFS------      15
tr|A0A7C5RN86|A0A7C5RN86_9ARCH     -DCWANRKPW---SEHVYYTYKF---------VRACL-GEELA-VYAMRHHVG-------    47
tr|A0A7C4ZF49|A0A7C4ZF49_9ARCH     -DCWANQRPL---PEHVYYTYKF---------VKDCL-GEELA-VHAMRHHVE-------    64
tr|A0A524F3J3|A0A524F3J3_9ARCH     PERYRKIPPF---PF-G----SK---------D-------------------------    63
tr|A0A7J2X8Y9|A0A7J2X8Y9_9EURY     -------RGYVPLPIKISIKNSKN-----IVAFGGEINTSICILSRN------------   324
tr|A0A482RV58|A0A482RV58_9ARCH     ------------------------------------------------------------   130
tr|A0A2E8V4G5|A0A2E8V4G5_9EURY     SDGWGLLQS----PSSIT--Q-------GAFFGRSISVSGDINNDGFNDLVV-------   563
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tr|A0A7K4DTG4|A0A7K4DTG4_9ARCH        NMKWTKLQSE---TMHIPQLTRT---------S-------------------------        67
tr|H6Q7G6|H6Q7G6_PYROT                ---------------------------------------------------------        82
tr|A0A7J2XB36|A0A7J2XB36_9EURY        ---------------------------------------------------------        53
tr|A0A662LIL0|A0A662LIL0_9EURY        ---------------------------------------------------------        53
tr|A0A7L4PAM3|A0A7L4PAM3_9CREN        ---------------------------------------------------------        83
tr|A4WL18|A4WL18_PYRAR                ---------------------------------------------------------        83
tr|A0A2D6X683|A0A2D6X683_9ARCH        ---------------------------------------------------------        86
tr|A0A151E9R7|A0A151E9R7_9EURY        -------RGYVPEPIEVNYNKK-------ILSVGAGENITGAVSHDK-----------       398
tr|A0A497EKV5|A0A497EKV5_9ARCH        ---------------------------------------------------------         0
tr|A0A482SQW3|A0A482SQW3_9ARCH        ---------------------------------------------------------        95
tr|A0A2E5RC13|A0A2E5RC13_9EURY        ---------------------------------------------------------       128
tr|A0A2E9DYS3|A0A2E9DYS3_9EURY        NDTWGDLQS----PSSIT--Q-------GAFFGRSISTSGDINNDGFNDLVV-------       563
tr|A0A524DJL4|A0A524DJL4_9ARCH        PERYRKIPPF---PF-G----SH---------D-------------------------        63
tr|A0A497HLC9|A0A497HLC9_9EURY        LKKYISIRES---PI------------------------------------------       217
tr|A0A7C4S6U6|A0A7C4S6U6_9ARCH        ---------------------------------------------------------        89
tr|A0A7J4LRK9|A0A7J4LRK9_9ARCH        ---------------------------------------------------------         0
tr|A0A7K4IJU2|A0A7K4IJU2_9ARCH        ---------------------------------------------------------       109
tr|A0A2D9NJM7|A0A2D9NJM7_9EURY        SDGWGLLQS----PSSIT--Q-------GAFFGRSISVSGDINNDGFNDLVV-------       563
tr|A0A5A7S0K7|A0A5A7S0K7_9EURY        ---------------------------------------------------------         0
tr|A0A202E9J8|A0A202E9J8_9EURY        DDLWALARDHENGPGDDSICRHPE-PGLTKHSFGQLTTASAA----------------       348
tr|A0A7J4TTH8|A0A7J4TTH8_9ARCH        ---------------------------------------------------------         0
tr|A0A2E6BWJ1|A0A2E6BWJ1_9EURY        --CDEKKPTF---LYHG----SN---------S-------------------------        27
tr|A0A7J4I1H7|A0A7J4I1H7_9ARCH        -NTWIPTN---------YP--KT---------LEAHEPGSGY---------P-------        44
tr|A0A7C6DZH7|A0A7C6DZH7_9ARCH        -DCWANRKPW---SEHVYYTYKF---------VRACL-GEELA-VYAMRHHVG------        58
tr|A0A662JAF1|A0A662JAF1_9CREN        ---------------------------------------------------------        53
tr|A0A151ENE1|A0A151ENE1_9EURY        -------RGYVPEPIAVNYDKK-------ILSVGAGENITGAVSHDK-----------       398
tr|A0A2U3CK81|A0A2U3CK81_HEIAB        -LDWHGNPSS---DEETIN--DI---------INKLEKEETVV-VSDFN----------       298
tr|A0A2U9ILS6|A0A2U9ILS6_9CREN        ---------------------------------------------------------         0
tr|A0A1V4YZZ9|A0A1V4YZZ9_9EURY        ---------------------------------------------------------        46
tr|A0A0X8UZZ7|A0A0X8UZZ7_9EURY        ----------SLSRNSPICPTCGIPLNMSPTF--ALEGSVT-----------------       272
tr|A0A1H6TIC6|A0A1H6TIC6_9EURY        ---------------------------------------------------------         0
tr|A0A7C0UA16|A0A7C0UA16_9ARCH        ---------------------------------------------------------        49
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Fungi

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sp|Q9H8W4|PKHF2_HUMAN                 ---------------------QSLKS---PLND--------------MSDDDDDDSS        248
tr|A0A2Z6RA14|A0A2Z6RA14_9GLOM        ---DL-------A----------------------------PGIHVWDLV-----S        745
tr|A0A397VBS0|A0A397VBS0_9GLOM        ---DL-------A----------------------------PGIHIWNSST----G        459
tr|A0A015IGQ3|A0A015IGQ3_RHIIW        ---DL-------A----------------------------PGIHVWDLV-----G        785
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tr|A0A397TNA4|A0A397TNA4_9GLOM    ---DL-------A--------------------------------PGIHVWDLV-----G    780
tr|A0A015KA47|A0A015KA47_RHIIW    ---DL-------A--------------------------------PGIHVWDLV-----G    785
tr|A0A015IQ23|A0A015IQ23_RHIIW    ---DL-------A--------------------------------PGIHVWDLV-----G    785
tr|A0A2I1G6N8|A0A2I1G6N8_9GLOM    ---DL-------A--------------------------------PGIHVWDLV-----G    785
tr|A0A2I1F0G8|A0A2I1F0G8_9GLOM    ---DL-------A--------------------------------PGIHVWDLV-----G    785
tr|U9SXZ4|U9SXZ4_RHIID            ---DL-------A--------------------------------PGIHVWDLV-----G    785
tr|A0A372RFQ0|A0A372RFQ0_9GLOM    ---DL-------A--------------------------------PGIHVWDLV-----G    786
tr|A0A4P9YZL8|A0A4P9YZL8_9FUNG    ----D-------M--------------------------------LRSRTMNFVQ----S    447
tr|A0A4V1IX88|A0A4V1IX88_9FUNG    ----Q-------A--------------------------------MRLRSLTFVA----A    446
tr|A0A4P9ZP44|A0A4P9ZP44_9FUNG    ---DN-------R--------------------------------MGMPLCS--------    456
tr|A0A0L0HGC7|A0A0L0HGC7_SPIPD    ------------E--------------------------------S-------------    673
tr|A0A177WRZ8|A0A177WRZ8_BATDL    ---------HPLS--------------------------------ID------D--    515
tr|F4P650|F4P650_BATDJ            ---------HPLS--------------------------------ID------D--    557
tr|A0A1Y1X2T5|A0A1Y1X2T5_9FUNG    ---------KNKR------------------------ILE----LANSSKDAE-N    374
tr|A0A507FBG2|A0A507FBG2_9FUNG    ---------LQALPSLPVEPIDDYCDD---SLTTKHYTGNAGVEMRRRASS--------    474
tr|A0A1Y1X1V7|A0A1Y1X1V7_9FUNG    ---------KPKR-----------------------VLE----LSSS-QFSE-E    608
tr|A0A4V1IY93|A0A4V1IY93_9FUNG    ---------------------------------------------------------    524
tr|A0A1Y1X677|A0A1Y1X677_9FUNG    ---------KNKR------------------------IKE----LAIPDKNAE-N    701
tr|A0A137P479|A0A137P479_CONC2    ---TL-------A--------------------------------LGLRRYSLIN----Y    867
tr|A0A507EFA4|A0A507EFA4_9FUNG    ------------L--------------------------------LARRSFDIP------    652
tr|A0A507CXB0|A0A507CXB0_9FUNG    ----------SP---------------------TLGSG----------GSSGDEDES    526
tr|A0A1S8W822|A0A1S8W822_9FUNG    ---------HSLS--------------------------------IN------E--    537
tr|A0A397IVX3|A0A397IVX3_9GLOM    ---DE-------T--------------------------------PRIRVLNQTT----S    725
tr|A0A139AK54|A0A139AK54_GONPJ    ----------VP---------------------TNPSG--------------VESIR    242
tr|A0A4P9WLC0|A0A4P9WLC0_9FUNG    ---------------------------------------------------------    705
tr|A0A1Y1WA63|A0A1Y1WA63_9FUNG    ---------HSLDPSALL--ST---LAA---LAGSASPP---RLEPRLEIT------EPP    486
tr|A0A0E9ND18|A0A0E9ND18_SAICN    ----------TLE--------DDLTN-G---------------------FQDIEIII    972
tr|A0A2G5BFQ4|A0A2G5BFQ4_COERN    ---------------------------------------------------------    386
tr|A0A0W4ZGN5|A0A0W4ZGN5_PNEJ7    ------------Q--------------------------------SNLNVSESIT----S    609
tr|A0A167MKJ0|A0A167MKJ0_CALVF    ----------------------N----------------------------------    641
tr|A0A165DP15|A0A165DP15_9BASI    ----------------------R----------------------------------    642
tr|M5FY58|M5FY58_DACPD            ----------------------H----------------------------------    640
tr|A0A1Y2IJD5|A0A1Y2IJD5_PYCCO    ---------------------------------------------------------    355
tr|A0A1Y2IIH2|A0A1Y2IIH2_PYCCO    ---------------------------------------------------------    526
tr|A0A1Y2CRY6|A0A1Y2CRY6_9FUNG    -----------------------------------P-I-------------------    154
tr|M9MDT8|M9MDT8_PSEA3            ---DSYTAPESAEMSSVPSTSTDDSVAN---ALGA----------YRLT-SDVDTDAE-G    1050
tr|A0A0L0SM81|A0A0L0SM81_ALLM3    ----------------------VDAHG----------------------HDTA--TQ    610
tr|A0A1M2VA80|A0A1M2VA80_TRAPU    ---------------------------------------------------------    656
tr|A0A2H3IXF5|A0A2H3IXF5_WOLCO    ---------------------------------------------------------    558
tr|A0A4Q9MH65|A0A4Q9MH65_9APHY    ---------------------------------------------------------    627
tr|A0A5E3XNR7|A0A5E3XNR7_9AGAM    ------------------E-----R--------------------------------    639
tr|A0A5C3FP20|A0A5C3FP20_PSEA2    ---DAYTAPESAEMSSVPSTSTDDSVAN---ALGA----------YRLT-SDVDTDAE-G    1003
tr|A0A081CEI2|A0A081CEI2_PSEA2    ---DAYTAPESAEMSSVPSTSTDDSVAN---ALGA----------YRLT-SDVDTDAE-G    1050
tr|K5WQA6|K5WQA6_PHACS            ---------------------------------------------------------    538
tr|A0A0H2S726|A0A0H2S726_9AGAM    ---------------------------------------------------------    617
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tr|A0A165Z002|A0A165Z002_9AGAM    ------------------E-----R---------------------------------    642
tr|A0A481SFP1|A0A481SFP1_9BASI    ---EVVAPPASAEISSVPSTSTDESMAN---ALRA---------NRIA-SDVDTDAE-G    1114
tr|A0A1Y1YYR8|A0A1Y1YYR8_9FUNG    ----------------QVE---------------TK----------------------    413
tr|A0A4Q9NS61|A0A4Q9NS61_9APHY    ---------------------------------------------------------    627
tr|A0A4Q9Q5Q4|A0A4Q9Q5Q4_9APHY    ---------------------------------------------------------    627
tr|A0A5C3NHQ1|A0A5C3NHQ1_9AGAM    -------------------A-----V-------------------------------    646
tr|A0A481SI77|A0A481SI77_9BASI    ---EAVAPPASAEISSVPSTSTDESMAN---ALGA---------IRIA-SDVDTDAE-G    1054
tr|S8FM81|S8FM81_FOMPI            ---------------------------------------------------------    534
tr|A0A2G8SBX2|A0A2G8SBX2_9APHY    ---------------------------------------------------------    645
tr|A0A137NR99|A0A137NR99_CONC2    ----------SDSNSSLPTL-----------LQ-TTP--------------------    399
tr|A0A1Y1Z786|A0A1Y1Z786_9FUNG   ----------N-NERKYSDSDSDPETAG----------------------SSY----P    288
tr|A0A5C3ERJ4|A0A5C3ERJ4_9BASI    ---EAIAAPDSAEMSSVPSTSTDESVAQ---TLRA---------YRIA-SDFDTDAE-G    1049
tr|A0A165BJR9|A0A165BJR9_9APHY    ---------------------------------------------------------    640
tr|A0A164UM97|A0A164UM97_9AGAM    ---------------------------------------------------------    620
tr|A0A0D7AXV4|A0A0D7AXV4_9AGAR    ------------------S-----E--------------------------------    616
tr|A0A6A6HW15|A0A6A6HW15_9PLEO    TLYQ--------------------------GSMEPRN-----ARVE---DSFD----    266
tr|A0A165L4G7|A0A165L4G7_9APHY    ---------------------------------------------------------    631
tr|A0A2N8UMQ8|A0A2N8UMQ8_9BASI    TAEAVVAAPDSAEMSSVPSSSTDDSVAQ---ALGA---------YQIGVSDGDTDAD-G    1082
tr|V5GIZ1|V5GIZ1_KALBG            AASDATTGADSVEMSSAPSTSTDDSVSQ---ALGG---------LRIGASDTDTDAE-G    719
tr|A0A2T2PC27|A0A2T2PC27_CORCC    TLYQ--------------------------GSMEPRN-----ARVE---DSFD----    266
tr|A0A0L0HIX4|A0A0L0HIX4_SPIPD    ----------Q------P--------------------------------------    437
tr|A0A5C2U016|A0A5C2U016_9APHY    ---------------------------------------------------------    629
tr|A0A5C2SLU6|A0A5C2SLU6_9APHY    ---------------------------------------------------------    629
tr|A0A2R6PJ56|A0A2R6PJ56_9APHY    ---------------------------------------------------------    904
tr|A0A074RVC0|A0A074RVC0_9AGAM    --------------------------------------------TFM-SSR    966
tr|X8IWG9|X8IWG9_9AGAM            --------------------------------------------TFM-SSR    966
tr|A0A067Q7F2|A0A067Q7F2_9AGAM    ------------------I-----I--------------------------------    685
tr|E6ZVA4|E6ZVA4_SPORE           TAEAVAAAPDSAEMSSVPSSSTDDSVAQ---ALGA---------YQIGVSDGDTDAD-G    1080
tr|A0A3N4I9X6|A0A3N4I9X6_ASCIM    ----------------------H-----HHKHKPQPRN-----ARVE---DDDD----    255
tr|A0A0C3NH87|A0A0C3NH87_PHLGI    ---------------------------------------------------------    646
tr|A0A166A0Y0|A0A166A0Y0_9AGAM    ---------------------------------------------------------    655
tr|A0A0F7RZL7|A0A0F7RZL7_9BASI    AAEAMATAPDSAEMSSVPSSSTDESVAQ---TLGA---------YQIGALDGDTDAE-A    1077
tr|A0A6A5VUJ0|A0A6A5VUJ0_9PLEO    TLYQ--------------------------GSMEPRN-----PRVE---DSFD----    266
tr|A0A6G6FQD5|A0A6G6FQD5_9APHY    ---------------------------------------------------------    651
tr|A0A0B7F915|A0A0B7F915_THACB    ------------------------------------------------TIM-ALR    950
tr|Q8NJX4|Q8NJX4_USTMD           --AEASAAPDSADMSSVPTTGTDGSVAQ---AFGA---------YRIGASDADTDAE-G    1062
tr|R9PB35|R9PB35_PSEHS           TVVATSVAPDSADMSSVPSTGTDESVAQ---TLDA---------YRMGTSGTETDVE-S    1051
tr|A0A077R837|A0A077R837_9BASI    ---ETMIAPDSAEMFSVPSTSTDDSVTH---TLEA---------YRMI-SDIDTDAE-G    1055
tr|A0A0D1E146|A0A0D1E146_USTMA    --AEASAAPDSADMSSVPTTGTDGSVAQ---AFGA---------YRIGASDADTDAE-G    1062
tr|A0A1K0FWK6|A0A1K0FWK6_9BASI    -EDANAVGPDNAEMSLVPSTSTDDSVAQ---TLGA---------YRFA-SDLDTDVEAG    1085
tr|A0A4U7KNT8|A0A4U7KNT8_9BASI    TAEAMATAPDSAEMSSVPSSSTDESVTQ---ALSA---------YHIGASDGDTDAE-V    1081
tr|A0A4T0IBV4|A0A4T0IBV4_WALIC    ----------TT-----------------------Q-A-----------RCQDS-EV-    854
tr|R9AV38|R9AV38_WALI9            ----------TT-----------------------Q-A-----------RCQDS-EV-    854
tr|A0A4T0J9U8|A0A4T0J9U8_WALIC    ----------TT-----------------------Q-A-----------RCQDS-GV-    854
tr|I2FM96|I2FM96_USTH4           -EDANAVGPDIAEMPLVPSTSTDDSVAQ---TLGA---------YRFA-SDLDTDVEAG    1084
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tr|A0A177BYI1|A0A177BYI1_9PLEO     TLYQ----------------------------GSMEPRN-----PRVE---DSFD----      266
tr|A0A5C3M448|A0A5C3M448_9AGAR     ------------------E--R--S-----------------------------------      692
tr|A0A0W0G1I7|A0A0W0G1I7_9AGAR     ------------------IDMTH--------------------------------------      881
tr|V2X232|V2X232_MONRO             ------------------IDMTH--------------------------------------      881
tr|A0A6A5UD68|A0A6A5UD68_9PLEO     TLYQ----------------------------GSMEPPS-----ARVE---DSFD----      265
tr|A0A507ES66|A0A507ES66_9FUNG     ----------E-----------------------------------S-------------      688
tr|A0A0K6FN13|A0A0K6FN13_9AGAM     ---------------------------------------------------TLM-SSR        960
tr|A0A5M9KV80|A0A5M9KV80_9PLEO     TLYQ---------G--------------------SMEPRN-----ARVE---DSFD----      266
tr|A0A2W1CTG6|A0A2W1CTG6_9PLEO     TLYQ---------G--------------------SMEPRN-----ARVE---DSFD----      266
tr|A0A6S6V7N3|A0A6S6V7N3_9PLEO     TFYQ---------G--------------------SMEPRN-----ARVE---DSFD----      266
tr|B2W9Q9|B2W9Q9_PYRTR             TLYQ---------G--------------------SMEPRN-----ARVE---DSFD----      266
tr|A0A316ZS75|A0A316ZS75_9PLEO     TLYQ---------G--------------------SMEPRN-----ARVE---DSFD----      266
tr|A0A6A6RWR3|A0A6A6RWR3_9PLEO     TMYQ----------------------------GSMEPRS-----ARVE---DSFD----      265
tr|A0A1Y2AFM9|A0A1Y2AFM9_9FUNG     ----------YGN---IDFNDSDF--YGNDDYIDSFDTSN------RYGATSSKEDDDIQ      278
tr|A0A1Y2GJ54|A0A1Y2GJ54_9FUNG     ----------INS---LGGPAELVPATSKPAQSSSSKPSM------VQPPNPLSEDEDLK      397
tr|A0A316VEC8|A0A316VEC8_9BASI     -------------ASTPATN----VEQ---CIHA-------------SRALDSDASLP        935
tr|A0A6A5QBT9|A0A6A5QBT9_AMPQU     TLYQ---------G--------------------AMEPRS-----ARID---DSFD----      267
tr|A0A6A6ZW62|A0A6A6ZW62_9PLEO     TLYQ---------G--------------------SMEPRS-----ARVE---DSFD----      266
tr|A0A317XKP1|A0A317XKP1_9BASI     VSSDAEPELTSAEMTSAP--STDESIST---ALSN---------YRLD-SDGGDDADAD      1025
tr|A0A5C3F116|A0A5C3F116_9BASI     --------PAAAAAEPLPTSSTRQTVTG---VNMAAAPSNDGSVSGRSGSSSGLF--DSD      1044
tr|A0A177WUX8|A0A177WUX8_BATDL     ----------S------P------------------------------------------      518
tr|F4P7P0|F4P7P0_BATDJ             ----------S------P------------------------------------------      518
tr|A0A6A6V864|A0A6A6V864_9PLEO     TLYQ----------------------------SSMEPRS-----ARVE--ADSFD----      176
tr|N1QHA6|N1QHA6_SPHMS             TLWQ---------TSGMSGTESALG-----GGTDRMQPRD-----ARVT--DDSFD----      286
tr|A0A2V1DU97|A0A2V1DU97_9PLEO     TLYQ----------------------------GSMEPRS-----ARVE---DSFD----      265
tr|A0A6A6TFR8|A0A6A6TFR8_9PLEO     TLYQ----------------------------RSMEPRS-----ARVE--TDSFD----      266
tr|A0A550CL33|A0A550CL33_9AGAR     ------------------SNDITGT------------------------------------      707
tr|A0A284S9X6|A0A284S9X6_ARMOS     ------------------H--VPPE-----------------------------------      671
tr|A0A0C3Q7C3|A0A0C3Q7C3_9AGAM     ----------SPTSVSFSQI-----R----------------------------------      681
tr|A0A367KQZ9|A0A367KQZ9_RHIST     ----------------------------KIPESLPAQ-----PQPVADDNEFD----         259
tr|A0A074VKM0|A0A074VKM0_9PEZI     P----------------------------GRMQARD-----ARVA--EDSFD----          259
tr|R0ITW9|R0ITW9_SETT2             TLYQ---------G--------------------SMEPRN-----ARVE---DSFD----      266
tr|A0A1Y2EN19|A0A1Y2EN19_9BASI     ----------N-------------------------------------------PIQ        985
tr|A0A507BWX7|A0A507BWX7_9FUNG     ----------SS-----------------------PGG----------DDDDEAEQS        544
tr|A0A6A6JKH9|A0A6A6JKH9_9PLEO     TLYQ----------------------------RSMEPRS-----ARVE--FDNFD----      264
tr|A0A3N4M7C5|A0A3N4M7C5_9PEZI     SRN-----------------K-----PPAPSMQPRN-----ARVE---DDDD----          270
tr|A0A6A5JXY0|A0A6A5JXY0_9PLEO     TLYQ---------G--------------------SMEPRN-----ARVE---DSFD----      266
tr|A0A6G1IPA9|A0A6G1IPA9_9PLEO     TLYQ----------------------------GSMEPRS-----ARVE---DSFD----      266
tr|A0A0D7A3M6|A0A0D7A3M6_9AGAR     ------------------L-SPTMS-----------------------------------      659
tr|A0A0C3B4B2|A0A0C3B4B2_9AGAM     ---------------------TTL-------------------------------------      682
tr|A0A067MUV1|A0A067MUV1_9AGAM     ----------S----------APSF-----------------------------------      732
tr|A0A0P1BAI6|A0A0P1BAI6_9BASI     --VLP--EPSPAA-QSDTSRSTDFS----------------------TSD-------S        898
tr|A0A0D0C6Q8|A0A0D0C6Q8_9AGAR     -----------------------------------------------------GES-TVR      986
tr|A0A197JU28|A0A197JU28_9FUNG     ----------AE-----------------------ISP-I---------------ESPG      1074
tr|A0A178AI31|A0A178AI31_9PLEO     TLYQ---------G--------------------SMEPRS-----ARVD---DSFD----      266
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tr|A0A316W3E2|A0A316W3E2_9BASI    --VLP--EPSPAA-QSDTSRSTDFS-----------------------TSD-------S         898
tr|A0A316YEW3|A0A316YEW3_9BASI    ---EDEEEEGEE----EEEHED----------------EGVLSSSSNIHKVDS----D          961
tr|A0A1Y2GHB3|A0A1Y2GHB3_9FUNG    ----------IS-----------------------SEP-L----------------LADA       1116
tr|A0A6A4GV68|A0A6A4GV68_9AGAR    -------------------------------------------------GDS-TIR           457
sp|O13821|VPS27_SCHPO             ----------------------------KTRKT-PS-----KPV---TNNED----           262
tr|A0A317T2J4|A0A317T2J4_9PEZI    VQK--------------------Q-----KPNSLMQPRN-----ARVE---DDDD----         263
tr|A0A6S6WPJ0|A0A6S6WPJ0_9PLEO    TLYQ---------G-------------------SMEPRN-----ARVE---DSFD----         266
tr|E3RQL4|E3RQL4_PYRTT            TLYQ---------G-------------------SMEPRN-----ARVE---DSFD----         266
tr|A0A0C9WXY8|A0A0C9WXY8_9AGAR    ------------------S--NLPE----------------------------------         664
tr|F8P7Z0|F8P7Z0_SERL9            ----------SEASSPFPRLTSPPTP---------------------------------         865
tr|F8Q904|F8Q904_SERL3           ----------SEASSPFPRLTSPPTP---------------------------------         762
tr|A0A292PL22|A0A292PL22_9PEZI    GQK--------------------Q-----KPNNLMQPRN-----ARVE---DDDD----         263
tr|A0A1Y1XKQ0|A0A1Y1XKQ0_9FUNG    ----------DAS---FDFNDSEF--YVN-DYMDNFDSSN------RHAAISSQEEDDIK        299
sp|Q0U4Z8|VPS27_PHANO             TLYQ---------G-------------------AMEPRS-----ARVD---DSFD----         266
tr|A0A6A6D0R8|A0A6A6D0R8_9PEZI    TLWQ---------GSSV-------------GQERMQPRG-----ARVT--EDSFD----         271
tr|A0A1Y1UY75|A0A1Y1UY75_9FUNG    ------------------------------------------------------------       641
tr|A0A6A6QQF5|A0A6A6QQF5_9PEZI    TLYQ--------------------------GSMEPRN-----ARVE---DSFD----         265
tr|A0A168QCU4|A0A168QCU4_MUCCL    ------------------------------------------------------------       62
tr|A0A0D2PBI9|A0A0D2PBI9_HYPSF    --------------------TSED-----------------------------------         746
tr|U4LJ46|U4LJ46_PYROM            SRR--------------------V-----APSASMQPRN-----ARVE---QDDD----         266
tr|A0A2T6ZAZ1|A0A2T6ZAZ1_TUBBO    VQK--------------------Q-----KPNNLMQPRN-----ARVE---DDDD----         238
tr|A0A4U0WTC3|A0A4U0WTC3_9PEZI    TLYQ---------GY---------------TQSPMQPRS-----ARVE---DSFD----         269
tr|A0A4S8LNE8|A0A4S8LNE8_DENBC    ----------SSSV-SMERVDEDEEEKG-------------------------NDED-TIR       1188
tr|A0A4V1IUA8|A0A4V1IUA8_9FUNG    ---------------------------AAA----AA-----------AEQ----         254
tr|L0P8I6|L0P8I6_PNEJ8            ------------------------------------------------------------       105
tr|R7Z380|R7Z380_CONA1            TLYQ---------GY-----------------Q-GSMEPRS-----ARVE---DSFD----       265
tr|E4ZXS6|E4ZXS6_LEPMJ            TLYQ---------S-------------------SMQPRS-----ARVE---DSFD----         371
tr|A0A168Q840|A0A168Q840_MUCCL    ---------------------------PVA----AA-----APIDKKEDDYD----         261
tr|A0A0C2S3H8|A0A0C2S3H8_AMAMU    ----------S----SRSKEGSNSEN---------------------------------         801
tr|A0A0C9N4H5|A0A0C9N4H5_9FUNG    ---------------------------PVA-----A-----APIDKKEDDYD----         260
tr|R4XHH8|R4XHH8_TAPDE            PDYQ------------------------AQTPK-----RHVSRAGDTED----         263
tr|A0A0B7NCZ8|A0A0B7NCZ8_9FUNG    --------------RGLLELTEKDNEKD----LHNMVAYG-------------GVD-ALI        128
tr|A0A163F5K2|A0A163F5K2_DIDRA    TLYQ---------G-------------------AMEPRN-----PRVE---DSFD----         266
tr|A0A6A6YA67|A0A6A6YA67_9PEZI    TLYQ--------------------------GSMEPRS-----ARVE---DSFD----         265
tr|A0A5C3KRI4|A0A5C3KRI4_9AGAR    --------------------DKPK-----------------------------------         701
tr|A0A0C2YUU7|A0A0C2YUU7_HEBCY    --------------------DAER-----------------------------------         758
tr|G4T9B0|G4T9B0_SERID            -------------------GNGHL----------------------------------         911
tr|A0A367JD28|A0A367JD28_RHIAZ    ---------------------------KTT----NI-----PQP-QPENDFD----         260
tr|A0A367JX58|A0A367JX58_RHIAZ    ---------------------------KTP----NI-----PQP-QPENDFD----         260
tr|A0A0M8MVG5|A0A0M8MVG5_9BASI    ---------RLSRLYSMLRLSSSA-------------------TSP-TED         183
tr|S2JXE4|S2JXE4_MUCC1            ---------------------------ATA----AP-----APADKKEDDYD----         261
tr|A0A286USL7|A0A286USL7_9AGAM    ------------------------------------------------------------       633
tr|A0A067NSG1|A0A067NSG1_PLEOS    ----------------------S-----------------------------------         656
tr|A0A316ZLR8|A0A316ZLR8_9BASI    --SQPLEPIEPAA---------------------------------------------         990
tr|A0A4T0G0A2|A0A4T0G0A2_9BASI    ----------TT----------------------P-G----------KRRDE-DS-           833
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tr|A0A075ARC6|A0A075ARC6_ROZAC  ------------------------------------------------------------  269
tr|A0A4V1IZA8|A0A4V1IZA8_ROZAC  ------------------------------------------------------------  269
tr|A0A3M7M1P8|A0A3M7M1P8_9PLEO  TLYQ---------G-------------------SMEPRN-----ARVE---DSFD----  278
tr|D5GD30|D5GD30_TUBMM          VQK-------------------Q-----KPNNLMQPRN-----ARVE---DDDD----  263
tr|A0A1X7RQY2|A0A1X7RQY2_ZYMTR  SLWQ---------GANA-------------STDRMQPRG-----ARVT--EDSFD----  271
tr|A0A1Y6LJF9|A0A1Y6LJF9_ZYMTR  SLWQ---------GANA-------------STDRMQPRG-----ARVT--EDSFD----  271
tr|A0A2H1GBB8|A0A2H1GBB8_ZYMTR  SLWQ---------GANA-------------STDRMQPRG-----ARVT--EDSFD----  271
tr|F9X9I8|F9X9I8_ZYMTI          SLWQ---------GANA-------------STDRMQPRG-----ARVT--EDSFD----  271
tr|A0A6A6A070|A0A6A6A070_9PLEO  TLYQ---------G-------------------SMEPRS-----ARVE---DSFD----  266
tr|B0DJQ4|B0DJQ4_LACBS          ------------------S--NLPE----------------------------------  664
tr|A0A369JTG7|A0A369JTG7_HYPMA  ------------------E--ISHK----------------------------------  721
tr|I4YHW0|I4YHW0_WALMC          ----------TT----------------------H-G-----------KT-------  819
tr|A0A507CTR3|A0A507CTR3_9FUNG  ----------ING--------------------HSSDSR------NVEDVVRQEQEEFE  600
tr|F4RZR0|F4RZR0_MELLP          ----------LS---------------------PTP-N-----------RPHDDLDLT  1033
tr|A0A4T0WVM5|A0A4T0WVM5_9ASCO  ----------------------------------ASTNK------KEIDIGEDDDDEIK  260
tr|A0A150VI72|A0A150VI72_9PEZI  TLWQ---------ESSL--VR---------DTSNRMQPRS-----ARA---EDSFD----  278
tr|A0A3M6ZNS9|A0A3M6ZNS9_HORWE  TLWQ---------DSGMGVSR---------AAEARMHPRS-----ARVDVDDSHFD----  285
tr|A0A1Y1XRY0|A0A1Y1XRY0_9FUNG  ---------------PPT----------------VY----------------------  416
tr|A0A074WRI8|A0A074WRI8_9PEZI  S-----------------------------GRMQARD-----PRVA--EDSFD----  259
tr|A0A6A7BU37|A0A6A7BU37_9PEZI  TLWQ---------ESGIDRQP----------EPQSQPQS-----AL---SDDRFD----  260
tr|K1WTE0|K1WTE0_TRIAC          -----------------------------------------G------RTPRSRRDFDADLQ  257
tr|J6EPC0|J6EPC0_TRIAS          -----------------------------------------G------RTPRSRRDFDADLQ  257
tr|A0A3N4JEN9|A0A3N4JEN9_9PEZI  VQK-------------------Q-----KPNNLMQPRN-----ARVE---DDDD----  263
tr|N1QCW3|N1QCW3_PSEFD          TLWQ---------DSGMGR----------SGSERMQPRG-----ARVT--EDSFD----  280
tr|M2STQ7|M2STQ7_COCH5          TLYQ---------G-------------------SMEPRN-----ARIE---DSFD----  266
tr|N4X1G1|N4X1G1_COCH4          TLYQ---------G-------------------SMEPRN-----ARIE---DSFD----  266
tr|A0A6A5SBR1|A0A6A5SBR1_9PLEO  TLYQ---------G-------------------SMEPRN-----ARVE---DSFD----  266
tr|A0A1Y2LUT7|A0A1Y2LUT7_EPING  TLYQ---------G-------------------SMEPRN-----PRVE---DSFD----  269
tr|E2LZL4|E2LZL4_MONPE          -------------------IDTTH----------------------------------  517
tr|A0A067S9R7|A0A067S9R7_GALM3  ---------SGSTSA--TAAADAEL---------------------------------  842
tr|L0PFS6|L0PFS6_PNEJ8          ------------------------------------------N-----------KSQSNLNVS  210
tr|F4NZK1|F4NZK1_BATDJ          ----------TTG---LGASSTT-----------STASSN------AHEDLAKKEDEDLA  280
tr|A0A3M7BVL5|A0A3M7BVL5_HORWE  TLWQ---------DSGMGVSR---------AAEARMHPRS-----ARVDVDDSHFD----  277
tr|A0A5J5F2H1|A0A5J5F2H1_9PEZI  SKR-----------------V-----T-TSSVEPRS-----ASVE---QDDD----  265
tr|A0A3M7GF14|A0A3M7GF14_HORWE  TLWQ---------DSGMGVSR---------AAEARMHPRS-----ARVDVDDSHFD----  285
tr|A0A3M7EI93|A0A3M7EI93_HORWE  TLWQ---------DSGMGVSR---------AAEARMHPRS-----ARVDVDDSHFD----  286
tr|A0A3M7A400|A0A3M7A400_HORWE  TLWQ---------DSGMGVSR---------AAEARMHPRS-----ARVDVDDSHFD----  285
tr|A0A162Y6D2|A0A162Y6D2_MUCCL  --------------RGLLELTEKDDEKD----LHNMVAYG------------GVD-ALI  128
tr|A0A4U0TZE6|A0A4U0TZE6_9PEZI  TLWQ---------DSGMGLSS---------RAESKMHPRS-----ARLE--PESFD----  282
tr|A0A3M7DFE3|A0A3M7DFE3_HORWE  TLWQ---------DSGMGVSR---------AAEARMHPRS-----ARVDVDDSHFD----  285
tr|A0A3M7C5L4|A0A3M7C5L4_HORWE  TLWQ---------DSGMGVSR---------AAEARMHPRS-----ARVDVDDSHFD----  285
tr|A0A1Z5SW51|A0A1Z5SW51_HORWE  TLWQ---------DSGMGVSR---------AAEARMHPRS-----ARVDVDDSHFD----  285
tr|A0A3M7IAA8|A0A3M7IAA8_HORWE  TLWQ---------DSGMGVSR---------AAEARMHPRS-----ARVDVDDSHFD----  285
tr|A0A1Y1ZMB2|A0A1Y1ZMB2_9PLEO  TLYQ----------------------------GSMEPRN-----PRVE---DSFD----  239
tr|A0A3M7EIE8|A0A3M7EIE8_HORWE  TLWQ---------DSGMGVSR---------AAEARMHPRS-----ARVDVDDSHFD----  285
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tr|A0A3M7FRT0|A0A3M7FRT0_HORWE    TLWQ---------DSGTGVSR---------AAEARMHPRS-----ARVDVDDSHFD----    285
tr|A0A3M6WMK4|A0A3M6WMK4_HORWE    TLWQ---------DSGMGVSR---------AAEARMHPRS-----ARVDVDDSHFD----    285
tr|A0A0W4ZU85|A0A0W4ZU85_PNEJ7    ------------------------------------------------------------    104
tr|A0A409Y3I3|A0A409Y3I3_9AGAR    --------------------ATYV------------------------------------    882
tr|A0A1X0QT00|A0A1X0QT00_RHIZD    ------------------------------KTP----NI-----PQP-QPENDFD----    260
tr|A0A2G4SSF8|A0A2G4SSF8_RHIZD    ------------------------------KTP----NI-----PQP-QPENDFD----    260
tr|A0A4V4JT84|A0A4V4JT84_AURPU    G-----------------------------ARMQARD-----PRVA--EDSFD----    338
tr|A0A4S9NID1|A0A4S9NID1_AURPU    G-----------------------------ARMQARD-----PRVA--EDSFD----    259
tr|A0A4V4JPE1|A0A4V4JPE1_AURPU    G-----------------------------ARMQARD-----PRVA--EDSFD----    259
tr|A0A4S8U3P8|A0A4S8U3P8_AURPU    G-----------------------------ARMQARD-----PRVA--EDSFD----    259
tr|A0A4T0CLC8|A0A4T0CLC8_AURPU    G-----------------------------ARMQARD-----PRVA--EDSFD----    259
tr|A0A4S8XK24|A0A4S8XK24_AURPU    G-----------------------------ARMQARD-----PRVA--EDSFD----    259
tr|A0A4S9PXJ6|A0A4S9PXJ6_AURPU    G-----------------------------ARMQARD-----PRVA--EDSFD----    259
tr|A0A4S9S1G3|A0A4S9S1G3_AURPU    G-----------------------------ARMQARD-----PRVA--EDSFD----    259
tr|A0A4S9X121|A0A4S9X121_AURPU    G-----------------------------ARMQARD-----PRVA--EDSFD----    259
tr|A0A4S9MIC5|A0A4S9MIC5_AURPU    G-----------------------------ARMQARD-----PRVA--EDSFD----    259
tr|A0A4T0AAT4|A0A4T0AAT4_AURPU    G-----------------------------ARMQARD-----PRVA--EDSFD----    259
tr|A0A4V4LMX5|A0A4V4LMX5_AURPU    G-----------------------------ARMQARD-----PRVA--EDSFD----    259
tr|A0A4S9MD28|A0A4S9MD28_AURPU    G-----------------------------ARMQARD-----PRVA--EDSFD----    259
tr|A0A4S9SZX6|A0A4S9SZX6_AURPU    G-----------------------------ARMQARD-----PRVA--EDSFD----    259
tr|A0A4S8TGC0|A0A4S8TGC0_AURPU    G-----------------------------VRMQARD-----PRVA--EDSFD----    259
tr|A0A4S9BBL0|A0A4S9BBL0_AURPU    G-----------------------------ARMQARD-----PRVA--EDSFD----    259
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Plants

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sp|Q9H8W4|PKHF2_HUMAN             PARSDSYSQSLKS---------PLNDMSDDDDDDDSSD----------------------    249
tr|A0A6T6RNY5|A0A6T6RNY5_9CHLO    -LPRMRARSVSDLAPNASALRRILDD--------EIS----------------------    155
tr|A0A1Q3D812|A0A1Q3D812_CEPFO    QV-SHAAQSPINDLTDLSTLRSWVNFPWGQSMEYEIYKAANTIRGYDKI-----------    411
tr|A0A6J1KWW8|A0A6J1KWW8_CUCMA    GDKATCSAVSPSSSST--------SIGSTKSDYT---------CHSAISNVNSTPCSN    151
tr|A0A443PY34|A0A443PY34_9MAGN    SI-SNAVQVAKHDVMDWTCTRGWLNMPVGLSMEDEIYKSTNTLRG--------------    281
tr|A0A0K9PNH3|A0A0K9PNH3_ZOSMR    GRKSHAEKARSKLLPM--QEDENITRFLEEGGNYPSS-SSNSQADMFSDLDTVTTSTSRS    142
tr|A0A6J1EUT4|A0A6J1EUT4_CUCMO    GDKATCSAVSLSSSST--------SIGSSRSDYT---------CHSAISNVNSTPCSN    151
tr|A0A6J1EZX4|A0A6J1EZX4_CUCMO    GDKATCSAVSLSSSST--------SIGSSRSDYT---------CHSAISNVNSTPCSN    151
tr|A0A0E0E2T1|A0A0E0E2T1_9ORYZ    KI-SRACQIPTNDLTDLSTLRSWLNLPWARTMEYEIYKAVNSIYGYFK-----------    350
tr|A0A0E0E2T0|A0A0E0E2T0_9ORYZ    KI-SRACQIPTNDLTDLSTLRSWLNLPWARTMEYEIYKAVNSIYGYFKLLVLSVILE--S    360
tr|I0YJ19|I0YJ19_COCSC            TV-SHAVQPAVHDVTDASALRSWFNPPMAASLAAELYKATNIVRSFA------------    140
tr|A0A6A3A7M5|A0A6A3A7M5_HIBSY    TI-SNAAQVAKHDVMDWACTRFWLNLPVGLSMEHEIYKASNILKS--------------    150
tr|A0A7J0FIS1|A0A7J0FIS1_9ERIC    TI-SNAMQAAKHDVMDWTCSRSWMNLPVGLSMEYEIYKSSNTLRS--------------    260
tr|A0A6I9U8S6|A0A6I9U8S6_SESIN    TI-SNAAQAAKHDVMDWTCSRGWLNLPVGLSMEHEIYKSASTLRS--------------    281
tr|A0A0D3F2U0|A0A0D3F2U0_9ORYZ    RI-SRASQPPTNDVTDLSTLRSWLNFPYAHTMEYEIYKAANSLNSYCK-----------    295
tr|I1NYS7|I1NYS7_ORYGL            RI-SRASQPPTNDVTDLSTLRSWLNFPYAHTMEYEIYKAANSLNSYCK-----------    340
tr|A0A6P6VUP2|A0A6P6VUP2_COFAR    QV-SRAAQLPTHDLTDLSTLRSWVNFPWGQSMEYEIYKATNTIRGY--T----------    496
tr|A0A6P6WBJ6|A0A6P6WBJ6_COFAR    QV-SRAAQLPTHDLTDLSTLRSWVNFPWGQSMEYEIYKATNTIRGY--T----------    496
tr|A0A068TKZ1|A0A068TKZ1_COFCA    QV-SRAAQLPTHDLTDLSTLRSWVNFPWGQSMEYEIYKATNTIRGY--T----------    496
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tr|A0A5K0XTZ9|A0A5K0XTZ9_9MAGN    TI-SNAVQTAKHDVIDWTCMRGWLNMPVGLSMEQEIYKATNALIS--------------    297
tr|A0A392PZY2|A0A392PZY2_9FABA    TI-SNSVQAAKHDVMDWTCARGWLNLPIGVSMEHEIYKASNTLRN--------------    202
tr|A0A5P1EJS8|A0A5P1EJS8_ASPOF    SI-SNAMQSAKHDVMDWTCTRGWLNLPLGLSMEHEIYKAANTLRS--------------    275
tr|A0A6A3BAW0|A0A6A3BAW0_HIBSY    TI-SNAAQVAKHDVMDWTCTRGWLNLPVGLSMEHEIYKASNTLRS--------------    237
tr|A0A2Z7AUH1|A0A2Z7AUH1_9LAMI    TI-SNAVQVAKHDVMDWTCSRGWINFPLGLSMEHEIYKSANTLRS--------------    277
tr|A0A6P4A6D2|A0A6P4A6D2_ZIZJJ    SI-SNAVQVAKHDVMDWTCTRGWLNLPVGLSMEHEIYKATNTLRS--------------    285
tr|A0A7J6GHB9|A0A7J6GHB9_CANSA    QV-SHAAQLPTNDLTDLSTLRSWLNIPWGQSMEYEIYKAANTIRAY--N----------    343
tr|A0A7J6H825|A0A7J6H825_CANSA    QV-SHAAQLPTNDLTDLSTLRSWLNIPWGQSMEYEIYKAANTIRAY--N----------    352
tr|A0A0P0WXV7|A0A0P0WXV7_ORYSJ    KI-SRACQIPTNDLTDLSTLRSWLNLPWARTMEYEIYKAVNSIYGYFKVWPSYNSNT--C    360
tr|A0A6P6SN61|A0A6P6SN61_COFAR    TI-SNAVQVAKHDVMDWTSMRGWLNLPVGFSMEQEIYKSANTLRN--------------    278
tr|A0A426YNR2|A0A426YNR2_ENSVE    SN-SNAVQSAKHDVTDWTCMRGWLNLPVGLCMEYEIYKATNTLRS--------------    276
tr|M0TUZ8|M0TUZ8_MUSAM            SN-SNAVQSAKHDVTDWTCMRGWLNLPVGLSMEYEIYKATNTLRS--------------    276
tr|A0A2G9H231|A0A2G9H231_9LAMI    TI-SNAAQVAKHDVTDWTCTRGWLNLPVGLSMEHEIYKSANTLRT--------------    281
tr|A0A6P5XW21|A0A6P5XW21_DURZI    TI-SNAVQVAKHDVMDWTCTRGWLNLPVGLSMEHEIYKASNTLRS--------------    287
tr|A0A6A2YCQ0|A0A6A2YCQ0_HIBSY    SI-SNASQVAKHDVMDWTCTRGWLNLPVGLSMEHEIYKASNTLRS--------------    291
tr|A0A0E0LCH3|A0A0E0LCH3_ORYPU    KI-SRACQIPTNDLTDLSTLRSWLNLPWARTMEYEIYKAVNSIYGYFK-----------    291
tr|A0A4D8ZKB4|A0A4D8ZKB4_SALSN    RV-SRAAQSPTHDLTDLSTLRSWLNFPWGLSMEHEIYKAANTLQGYTKCEKPVPLFV--G    290
tr|A0A4D8XQ43|A0A4D8XQ43_SALSN    RV-SRAAQSPTHDLTDLSTLRSWLNFPWGQSMEHEIYKAANTLQGYTKCEKPVPLFV--G    290
tr|A0A0E0J2X9|A0A0E0J2X9_ORYNI    SI-SNATQTAKHDVMDWTSTRGWLNLPIGLTMEHEIYKAANSVRS--------------    299
tr|A0A5N5KUW8|A0A5N5KUW8_9ROSI    QV-SNAAQLPTHDLTDLSTLRSWVNFPWGQTMEYEIYKAANTIQGY--N----------    322
tr|I1Q300|I1Q300_ORYGL            KI-SRACQIPTNDLTDLSTLRSWLNLPWARTMEYEIYKAVNSIYGYFK-----------    350
tr|A0A0D3GHQ6|A0A0D3GHQ6_9ORYZ    KI-SRACQIPTNDLTDLSTLRSWLNLPWARTMEYEIYKAVNSIYGYFK-----------    350
tr|A0A0E0AAS1|A0A0E0AAS1_9ORYZ    KI-SRACQIPTNDLTDLSTLRSWLNLPWARTMEYEIYKAVNSIYGYFK-----------    350
tr|Q5Z9E4|Q5Z9E4_ORYSJ           KI-SRACQIPTNDLTDLSTLRSWLNLPWARTMEYEIYKAVNSIYGYFK-----------    350
tr|A0A0P0WY10|A0A0P0WY10_ORYSJ    KI-SRACQIPTNDLTDLSTLRSWLNLPWARTMEYEIYKAVNSIYGYFK-----------    350
tr|A0A0E0PZ19|A0A0E0PZ19_ORYRU    KI-SRACQIPTNDLTDLSTLRSWLNLPWARTMEYEIYKAVNSIYGYFK-----------    351
tr|A0A0E0PZ18|A0A0E0PZ18_ORYRU    KI-SRACQIPTNDLTDLSTLRSWLNLPWARTMEYEIYKAVNSIYGYFKAM---------    353
tr|A0A5J4Y9K4|A0A5J4Y9K4_9CHLO    TI-AQAVRPAIHDVTDGSVMRSWLNSPLSSGLESDIYKATNILNSFA------------    257
tr|A0A0D3GHQ7|A0A0D3GHQ7_9ORYZ    KI-SRACQIPTNDLTDLSTLRSWLNLPWARTMEYEIYKAVNSIYGYFKLLVRSVILE--S    360
tr|A0A0E0AAS2|A0A0E0AAS2_9ORYZ    KI-SRACQIPTNDLTDLSTLRSWLNLPWARTMEYEIYKAVNSIYGYFKLLVRSVILE--S    360
tr|B9FTQ4|B9FTQ4_ORYSJ           KI-SRACQIPTNDLTDLSTLRSWLNLPWARTMEYEIYKAVNSIYGYFK-----------    350
tr|A0A4S4EU20|A0A4S4EU20_CAMSI    QV-SRAAQLPTNDVTDLSTLRSWANFPWAQSMEYEIYKATNTIRGYN-D----------    479
tr|A0A7J7GVA1|A0A7J7GVA1_CAMSI    QV-SRAAQLPTNDVTDLSTLRSWANFPWAQSMEYEIYKATNTIRGYN-D----------    479
tr|A0A2R6Q5C5|A0A2R6Q5C5_ACTCC    TI-SNAMQAAKHDVMDWTCSRGWMNLPVGLSMEYEIYKSSNTLRS--------------    215
tr|A0A6J0ZNH9|A0A6J0ZNH9_9ROSI    TI-SNAVQVAKHDVMDWTCTRGWLNLPVGLSMEHEIYKASNTLRS--------------    254
tr|A0A1D1Y8J8|A0A1D1Y8J8_9ARAE    SI-SNSVQSAKHDVMDWTCSRGWLNLPLGLSMEHEIYKASNSLRS--------------    278
tr|A0A6I9RV21|A0A6I9RV21_ELAGV    SI-SNAMQSAKHDVMDWTSTRGWLNLPVGLSMEHEIYKAANTLRS--------------    277
tr|A0A6P4DQY5|A0A6P4DQY5_ARADU    TI-SNAMQVAKHDVMDWTCARGWLNLPVGLSMEHEIYKASNTLKN--------------    278
tr|A0A2R6QUJ3|A0A2R6QUJ3_ACTCC    TI-SNAMQAAKHDVMDWTCSRGWMNLPVGLSMEYEIYKSSNTLRS--------------    285
tr|A0A7J6GLE9|A0A7J6GLE9_CANSA    SV-SNAAQIAKHDVMDWTCTRGWLNLPVGLSMEHEIYKASNTLRS--------------    287
tr|A0A6G1FAM2|A0A6G1FAM2_9ORYZ    RI-SRASQPPTHDVTDLSTLRSWLNFPYAHTMEYEIYKAANSLNSYCK-----------    336
tr|A0A6J0JU70|A0A6J0JU70_RAPSA    QV-SPAAQLPTHDLTDLSTLRSWVNFPWGQSMEYEIYKATNTIRGYI-S----------    301
tr|A0A4U5Q811|A0A4U5Q811_POPAL    QV-SNAAQLPTHDLTDLSTLRSWVNFPWGQTMGYEIYKAANTIQGY--N----------    321
tr|A0A6M2E6R0|A0A6M2E6R0_9ROSI    QV-SNAAQLPTHDLTDLSTLRSWVNFPWGQTMGYEIYKAANTIQGY--N----------    321
tr|A0A2K1YGU9|A0A2K1YGU9_POPTR    QV-SNAAQLPTHDLTDLSTLRSWVNFPWGQTMGYEIYKAANTIQGY--N----------    321
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tr|A0A6G1FAM5|A0A6G1FAM5_9ORYZ    RI-SRASQPPTHDVTDLSTLRSWLNFPYAHTMEYEIYKAANSLNSYCK------------    336
tr|B8A231|B8A231_MAIZE            RF-SRACQLPTQDLTDLSTLRSWINTPWAVRMEYEIYKAANSIHGYCK-----------    343
tr|B6SKK2|B6SKK2_MAIZE            RF-SRACQLPTQDLTDLSTLRSWINTPWAVRMEYEIYKAANSIHGYCK-----------    343
tr|A0A5A7NW81|A0A5A7NW81_STRAF    RV-SRAAQVPTHDLTDLSTLRSWVNFPWGQSMEYEIYKATNTIRGYY-A----------    349
tr|A0A0E0HS99|A0A0E0HS99_ORYNI    KI-SHACQIPTNDLTDLSTLRSWLNLPWARTMEYEIYKAVNSIYGYFK-----------    350
tr|A0A5J9TB85|A0A5J9TB85_9POAL    QL-SRACQLPTQDLTDLSTLRSWLNFPWATTMEYEIYKAANSIYGYCK-----------    391
tr|A0A6J0JVV9|A0A6J0JVV9_RAPSA    QV-SPAAQLPTHDLTDLSTLRSWVNFPWGQSMEYEIYKATNTIRGYI-S----------    396
tr|A0A2G9HVA1|A0A2G9HVA1_9LAMI    QV-SRAAQLPTHDLTDLSTLRSWVNFPWGQSMEYEIYKATSTIRGY--A----------    415
tr|A0A1D6P215|A0A1D6P215_MAIZE    RF-SRACQLPTQDLTDLSTLRSWINTPWAVRMEYEIYKAANSIHGYCK-----------    503
tr|A0A3L6DHQ6|A0A3L6DHQ6_MAIZE    RF-SRACQLPTQDLTDLSTLRSWINTPWAVRMEYEIYKAANSIHGYCK-----------    503
tr|A0A444D484|A0A444D484_ENSVE    AV-SKPAGLQSHE-----DLARRLQEELNK----------------------------    109
tr|A0A6N2L9V1|A0A6N2L9V1_SALVM    TI-SNAMQVAKHDVVDWTCTRGWLNLPVGFSMEHEVYKASNTLRS--------------    259
tr|A0A5N5MEC2|A0A5N5MEC2_9ROSI    TI-SNAMQVAKHDVVDWTCTRGWLNLPVGFSMEHEVYKASNTLRS--------------    259
tr|A0A6M2ESH9|A0A6M2ESH9_9ROSI    TI-SNAMQVAKHDVVDWTCTRGWLNLPLGFSMEQEVYKASNTLRS--------------    257
tr|A9PHU1|A9PHU1_POPTR            TI-SNAMQVAKHDVVDWTCTRGWLNLPVGFSMEHEVYKASNTLRS--------------    260
tr|A0A4V4H9B5|A0A4V4H9B5_MUSBA    SN-SNAVQSAKHDVTDWTCMRGWLNLPVGLSMEYEIYKATNTLRS--------------    276
tr|A0A5A7Q664|A0A5A7Q664_STRAF    TI-SNAVQVAKHDVMDWTCLRGWLNLPVGLSMEHEIYKASVTLRSYSRW----------    285
tr|A0A3L6S5C4|A0A3L6S5C4_PANMI    AA-NRP-IVHSHE-----DLAKKLQEAMDI----------------------------    449
tr|A0A0E0JXR6|A0A0E0JXR6_ORYPU    RI-SRASQPPTHDVTDLSTLRSWLNFPYAHTMEYEIYKAANSLNSYCK-----------    316
tr|A0A6U9R6X8|A0A6U9R6X8_9CHLO    -NQQTTTNKISHE-----ELTRKLQEDYDVKYAEAISKRETRKADFPRE----------    413
tr|A0A0D9VE44|A0A0D9VE44_9ORYZ    RI-SRASQPPTHDVTDLSTLRSWLNFPYAHTMEYEIYKAANSLNSYCK-----------    336
tr|A0A444ZAW7|A0A444ZAW7_ARAHY    TI-SNAVQVAKHDVMDWTCARGWLNLPVGLSMEHEIYKASNTLKN--------------    292
tr|A0A0E0CIE1|A0A0E0CIE1_9ORYZ    RI-SRASQPPTHDVTDLSTLRSWLNFPYAHTMEYEIYKAANSLNSYCK-----------    339
tr|A0A445EPD8|A0A445EPD8_ARAHY    TI-SNAMQVAKHDVMDWTCARGWLNLPVGLSMEHEIYKASNTLKN--------------    292
tr|A0A0D9YPP9|A0A0D9YPP9_9ORYZ    RI-SRASQPPTHDVTDLSTLRSWLNFPYAHTMEYEIYKAANSLNSYCK-----------    340
tr|B8AEK2|B8AEK2_ORYSI            RI-SRASQPPTHDVTDLSTLRSWLNFPYAHTMEYEIYKAANSLNSYCK-----------    340
tr|A0A0E0G405|A0A0E0G405_ORYNI    RI-SRASQPPTHDVTDLSTLRSWLNFPYAHTMEYEIYKAANSLNSYCK-----------    340
tr|A0A0E0NC57|A0A0E0NC57_ORYRU    RI-SRASQPPTHDVTDLSTLRSWLNFPYAHTMEYEIYKAANSLNSYCK-----------    340
tr|A0A4U5QRQ4|A0A4U5QRQ4_POPAL    TI-SNAMQVAKHDVVDWTCTRGWLNLPLGFSMEHEVYKASNTLRS--------------    258
tr|A0A068U4E6|A0A068U4E6_COFCA    TI-SNAVQVAKHDVMDWTSMRGWLNLPVGFSMEQEIYKSANTLRN--------------    377
tr|A0A175YLZ2|A0A175YLZ2_DAUCS    QI-SRAAQLPTHDLTDLSTLRSWLNFPWGQSMEYEIYKATNTIRGY--N----------    481
tr|D7TC91|D7TC91_VITVI            SI-SNAAQVAKHDVMDWTCTRGWLNLPVGLSMEHEIYKSANTLRS--------------    279
tr|A0A2P5CYF8|A0A2P5CYF8_PARAD    SV-SNAMQVAKHDVMDWTCTRGWLNLPVGLSMEHEIYKASNTLRS--------------    284
tr|A0A7J8V4X5|A0A7J8V4X5_9ROSI    TI-SNAVQVAKHDVMDWTCTRGWLNLPFGLSMEHEIYKASNTLRS--------------    287
tr|A0A7J8S9U3|A0A7J8S9U3_GOSDV    TI-SNAVQVAKHDVMDWTCTRGWLNLPFGLSMEHEIYKASNTLRS--------------    287
tr|A0A2K1WWT5|A0A2K1WWT5_POPTR    TI-SNAMQVAKHDVMDWTCMRGWLNLPVGLSMEHEIYKASNTLRS--------------    287
tr|A0A1U7ZHA9|A0A1U7ZHA9_NELNU    SV-SNAVQVAKHDVMDWTCTRGWLNLPVGLSMEHEIYKSSNTLRT--------------    285
tr|A0A4U5Q985|A0A4U5Q985_POPAL    TI-SNAMQVAKHDVMDWTCMRGWLNLPVGLSMEHEIYKASNTLRS--------------    289
tr|A0A6J1H961|A0A6J1H961_CUCMO    GDKATCSAISLSSSST--------SIGSTKSGYT---------CQSAISNIPSTPCSN    151
tr|A0A2J6JPZ5|A0A2J6JPZ5_LACSA    QV-SRAAQLPTYDVTDLSTLRSWLNFPWGQSMEYEIYKATNTIQGY--S----------    345
tr|B9F4F8|B9F4F8_ORYSJ            RI-SRASQPPTHDVTDLSTLRSWLNFPYAHTMEYEIYKAANSLNSYCK-----------    340
tr|Q6EUF2|Q6EUF2_ORYSJ            RI-SRASQPPTHDVTDLSTLRSWLNFPYAHTMEYEIYKAANSLNSYCK-----------    340
tr|A0A0P0VGT7|A0A0P0VGT7_ORYSJ    RI-SRASQPPTHDVTDLSTLRSWLNFPYAHTMEYEIYKAANSLNSYCK-----------    340
tr|A0A4D8Z2T2|A0A4D8Z2T2_SALSN    RV-SRAAQSPTHDLTDLSTLRSWLNFPWGQSMEHEIYKAANTLQGYT---KPVPLFV--S    344
tr|A0A2U1LN57|A0A2U1LN57_ARTAN    HV-SRASQLPTHDLTDLSTLRSWLNFPWGQSMEHEIYKATNIIQGY--S----------    257
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tr|A0A397XXT3|A0A397XXT3_BRACM        QV-SPAAQLPTHDLTDLSTLRSWVNFPWGQSMEYEIYKATNTIRGYI-S-----------        394
tr|A0A5D2S5L7|A0A5D2S5L7_GOSMU        SI-SNAAQVAKHDVMDWTCTRGWLNLPVGLSMEHEIYKASTTLRS--------------        289
tr|M4ERI0|M4ERI0_BRARP                GYKNRSAKGSSILRFN--QSHRL-TFGFGFK---------------------------        114
tr|A0A5A7P127|A0A5A7P127_STRAF        -PPGRPAGLQSHE-----DLARKLQHILSHIVDLH-----------EV-----------        609
tr|A0A444ES18|A0A444ES18_ENSVE        SN-SNAVQSAKHDVTDWTCMRGWLNLPVGLCMEYEIYKATNTLRS--------------        276
tr|A0A6P5ZB34|A0A6P5ZB34_DURZI        SI-SNAVQVAKHDVMDWTCTWGWLNLPVGLSMEHEIYKATNTLKS--------------        261
tr|A0A067KCV5|A0A067KCV5_JATCU        TI-SNAVQVAKHDVMDWTCSRGWLNLPVGLSMEHEIYKASNTLKS--------------        264
tr|A0A5N5KU68|A0A5N5KU68_9ROSI        GHRNRAAKGSSRMTSQ--NEDEILNKILDNDGEESSSSGQQFNTDLVSSIQRASSSASYS        144
tr|A0A2I4GWR6|A0A2I4GWR6_JUGRE        TI-SNAVQVAKHDVIDWTCTRGWLNLPLGWSMEHEIYKASNTLRS--------------        282
tr|A0A5J5B0G0|A0A5J5B0G0_9ASTE        TI-SNAVQVAKHDVMDWTCTRGWLNLPVGLLMEDEIYKSSNMLRS--------------        282
tr|A0A067GEB1|A0A067GEB1_CITSI        TI-SNAVQVAKHDVVDWTCTRGWLNLPVGLSMEYEIYKASNTLRS--------------        261
tr|A0A2P5FH90|A0A2P5FH90_TREOI        SV-SNAMQVAKHDVMDWTCTRGWLNLPVGLSMEHEIYKASNTLRS--------------        284
tr|A0A6P5ZC23|A0A6P5ZC23_DURZI        SI-SNAVQVAKHDVMDWTCTWGWLNLPVGLSMEHEIYKATNTLKS--------------        287
tr|A0A7J9HAJ7|A0A7J9HAJ7_9ROSI        TI-SNAVQVAKHDVMDWTCTRGWLNLPFGLSMEHEIYKASNTLRS--------------        287
tr|A0A5D2UUD2|A0A5D2UUD2_GOSMU        TI-SNAVQVAKHDVMDWTCTRGWLNLPFGLSMEHEIYKASNTLRS--------------        287
tr|A0A5D2Z4X4|A0A5D2Z4X4_GOSMU        TI-SNAVQVAKHDVMDWTCTRGWLNLPVGLSMEHEIYKASNTLTS--------------        287
tr|A0A7J9A5M7|A0A7J9A5M7_9ROSI        TI-SNAVQVAKHDVMDWTCTRGWLNLPFGLSMEHEIYKASNTLRS--------------        287
tr|A0A5D2CBR4|A0A5D2CBR4_GOSDA        TI-SNAVQVAKHDVMDWTCTRGWLNLPFGLSMEHEIYKASNTLRS--------------        287
tr|A0A7J8MIP5|A0A7J8MIP5_9ROSI        TI-SNAVQVAKHDVMDWTCTRGWLNLPFGLSMEHEIYKASNTLRS--------------        287
tr|A0A7J8XT08|A0A7J8XT08_GOSAI        TI-SNAVQVAKHDVMDWTCTRGWLNLPFGLSMEHEIYKASNTLRS--------------        287
tr|A0A7J9M837|A0A7J9M837_GOSSC        TI-SNAVQVAKHDVMDWTCTRGWLNLPFGLSMEHEIYKASNTLRS--------------        287
tr|A0A7J9EM10|A0A7J9EM10_9ROSI        TI-SNAVQVAKHDVMDWTCTRGWLNLPFGLSMEHEIYKASNTLRS--------------        287
tr|A0A0D2TD84|A0A0D2TD84_GOSRA        TI-SNAVQVAKHDVMDWTCTRGWLNLPFGLSMEHEIYKASNTLRS--------------        287
tr|A0A7J9JNL7|A0A7J9JNL7_9ROSI        TI-SNAVQVAKHDVMDWTCTRGWLNLPFGLSMEHEIYKASNTLRS--------------        287
tr|A0A5D2KQW7|A0A5D2KQW7_GOSTO        TI-SNAVQVAKHDVMDWTCTRGWLNLPFGLSMEHEIYKASNTLRS--------------        287
tr|A0A5D2QB35|A0A5D2QB35_GOSTO        TI-SNAVQVAKHDVMDWTCTRGWLNLPVGLSMEHEIYKASNTLRS--------------        287
tr|A0A2P5W217|A0A2P5W217_GOSBA        TI-SNAVQVAKHDVMDWTCTRGWLNLPFGLSMEHEIYKASNTLRS--------------        287
tr|A0A2P5WJU2|A0A2P5WJU2_GOSBA        TI-SNAVQVAKHDVMDWTCTRGWLNLPVGLSMEHEIYKASNTLRS--------------        287
tr|A0A0B0MVA9|A0A0B0MVA9_GOSAR        TI-SNAVQVAKHDVMDWTCTRGWLNLPVGLSMEHEIYKASNTLRS--------------        287
tr|A0A1R3IUY7|A0A1R3IUY7_9ROSI        TI-SNAVQVAKHDVMDWTCSRGWLNLPVGLSMEHEIYKASNTLRS--------------        288
tr|A0A1R3HA36|A0A1R3HA36_COCAP        TI-SNAVQVAKHDVMDWTCSRGWLNLPVGLSMEHEIYKASNTLRS--------------        288
tr|A0A151SSP4|A0A151SSP4_CAJCA        TI-SNAAQVAKHDVMDWTCARGWINLPIGLSMEHEIYKASNTLRN--------------        288
tr|I1LYB0|I1LYB0_SOYBN                TI-SNAVQGAKHDVTDWTCARGWINLPIGLSMEHEIYKASNTLRN--------------        288
tr|A0A5D2WLD7|A0A5D2WLD7_GOSMU        SI-SNAAQVAKHDVMDWTCTRGWLNLPVGLSMEHEIYKASTTLRS--------------        288
tr|A0A445HEB0|A0A445HEB0_GLYSO        TI-SNAVQGAKHDVTDWTCARGWINLPIGLSMEHEIYKASNTLRN--------------        288
tr|A0A5J5T6I5|A0A5J5T6I5_GOSBA        SI-SNAAQVAKHDVMDWTCTRGWLNLPVGLSMEHEIYKASTTLRS--------------        288
tr|A0A0B0NT31|A0A0B0NT31_GOSAR        SI-SNAAQVAKHDVMDWTCTRGWLNLPVGLSMEHEIYKASTTLRS--------------        288
tr|A0A5D2E253|A0A5D2E253_GOSDA        SI-SNAAQVAKHDVMDWTCTRGWLNLPVGLSMEHEIYKASTTLRS--------------        288
tr|A0A7J9I4D0|A0A7J9I4D0_9ROSI        SI-SNAAQVAKHDVMDWTCTRGWLNLPVGLSMEHEIYKASTTLRS--------------        289
tr|A0A7J8W2F5|A0A7J8W2F5_9ROSI        SI-SNAAQVAKHDVMDWTCTRGWLNLPVGLSMEHEIYKASTTLRS--------------        289
tr|A0A7J8T5I6|A0A7J8T5I6_GOSDV        SI-SNAAQVAKHDVMDWTCTRGWLNLPVGLSMEHEIYKASTTLRS--------------        289
tr|A0A7J9FFD9|A0A7J9FFD9_9ROSI        SI-SNAAQVAKHDVMDWTCTRGWLNLPVGLSMEHEIYKASTTLRS--------------        289
tr|A0A7J9KCR1|A0A7J9KCR1_9ROSI        SI-SNAAQVAKHDVMDWTCTRGWLNLPVGLSMEHEIYKASTTLRS--------------        289
tr|A0A7J9CVS4|A0A7J9CVS4_GOSGO        SI-SNAAQVAKHDVMDWTCTRGWLNLPVGLSMEHEIYKASTTLRS--------------        289
tr|A0A1U8I6I8|A0A1U8I6I8_GOSHI        SI-SNAAQVAKHDVMDWTCTRGWLNLPVGLSMEHEIYKASTTLRS--------------        289
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tr|A0A5D2I0Z6|A0A5D2I0Z6_GOSTO    SI-SNAAQVAKHDVMDWTCTRGWLNLPVGLSMEHEIYKASTTLRS--------------    289
tr|A0A5D2S8Z8|A0A5D2S8Z8_GOSMU    SI-SNAAQVAKHDVMDWTCTRGWLNLPVGLSMEHEIYKASTTLRS--------------    289
tr|A0A0D2VIV8|A0A0D2VIV8_GOSRA    SI-SNAAQVAKHDVMDWTCTRGWLNLPVGLSMEHEIYKASTTLRS--------------    289
tr|A0A5J5NQE0|A0A5J5NQE0_GOSBA    SI-SNAAQVAKHDVMDWTCTRGWLNLPVGLSMEHEIYKASTTLRS--------------    289
tr|A0A5D2A1Z1|A0A5D2A1Z1_GOSDA    SI-SNAAQVAKHDVMDWTCTRGWLNLPVGLSMEHEIYKASTTLRS--------------    289
tr|J3LB56|J3LB56_ORYBR            RI-SRASQPPTRDVTDLSTLRSWLNFPYAHTMEYEIYKAANSLNSYCK-----------    295
tr|A0A426YGZ0|A0A426YGZ0_ENSVE    SN-SNCIQSAKHDVTDWTCMRGWLNLPVGLSMEYEIYKATNILRS--------------    276
tr|A0A7J7C9A8|A0A7J7C9A8_TRIWF    QV-SRAAQLPTHDLTDLSTLRSWLNFPWGQSMEYEIYKAANIIQGY--N----------    328
tr|A0A2P5YQD1|A0A2P5YQD1_GOSBA    SI-SNAAQVAKHDVMDWTCTRGWLNLPVGLSMEHEIYKASTTLRS--------------    288
tr|R0I6U2|R0I6U2_9BRAS            QV-SPAAQLPTHDLTDLSTLRSWVNFPWGQSMEYEIYKATNTIRGYI-T----------    303
tr|M4EU55|M4EU55_BRARP            QV-SPAAQLPTHDLTDLSTLRSWVNFPWGQSMEYEIYKATNTIRGYI-S----------    393
tr|A0A022QHF4|A0A022QHF4_ERYGU    QV-SRAAQLPTHDLTDLSTLRSWVNFPWGQTMEYEIYKAVNTIHGY--A----------    409
tr|A0A6S7M578|A0A6S7M578_LACSI    QV-SRAAQLPTYDVTDLSTLRSWLNFPWGQSMEYEIYKATNTIQGY--S----------    428
tr|A0A078GNT4|A0A078GNT4_BRANA    QV-SPAAQLPTHDLTDLSTLRSWVNFPWGQSMEYEIYKATNTIRGYI-S----------    424
tr|A0A6N2AVW0|A0A6N2AVW0_SOLCI    QV-SRAAQLPTHDLTDLSTLRSWVNFPWGQSMEYEIYKAANTIRGY--E----------    498
tr|A0A6G1CWD1|A0A6G1CWD1_9ORYZ    KT-SRACQLPTNDLTDLSTLRSWLNLPWAGTMEYEIYKAVNSIYGYFK-----------    345
tr|A0A7J9CJB5|A0A7J9CJB5_GOSGO    GHRSRAGRGSSKPAAK--DEDDILNQILGADIKESSSLRVASNNDMTPSVARANSSSSSS    144
tr|A0A444G2C7|A0A444G2C7_ENSVE    SN-SNCIQSAKHDVTDWTCMRGWLNLPVGLSMEYEIYKATNILRS--------------    276
tr|A0A5N6QGY5|A0A5N6QGY5_9ROSI    TI-SNAMQVAKHDVMDWTCTRGWLNLPIGMSMEDEIYKASNTLKS--------------    283
tr|W9RVR7|W9RVR7_9ROSA            SV-SNAAQVAKHDVMDWTCTRGWLNLPVGLSMEHEIYKASNTLRT--------------    285
tr|A0A5B7AS41|A0A5B7AS41_DAVIN    TI-SNAMQVAKHDVTDWTCTRGWLNLPVGLLMEHEIYKSSNTLRS--------------    283
tr|A0A7J9C8P3|A0A7J9C8P3_GOSGO    TI-SNAVQVAKHDVMDWTCTRGWLNLPVGLSMEHEIYKASNTLRS--------------    287
tr|A0A1U7WIN6|A0A1U7WIN6_NICSY    TI-SNAVQAAKHDVMDWTCTRGWLNLPVGLSMEYEIYKSSNTLRT--------------    281
tr|A0A1J6IC17|A0A1J6IC17_NICAT    TI-SNAVQAAKHDVMDWTCTRGWLNLPVGLSMEYEIYKSSNTLRT--------------    281
tr|A0A1S4DM27|A0A1S4DM27_TOBAC    TI-SNAVQAAKHDVMDWTCTRGWLNLPVGLSMEYEIYKSSNTLRT--------------    281
tr|A0A6A3B545|A0A6A3B545_HIBSY    SI-SNASQVAKHDVMDWTCTRGWLNLPVGLSMEHEIYKASNTLRS--------------    290
tr|A0A7N2LTK1|A0A7N2LTK1_QUELO    SI-SNAVQVAKHDVIDWTCTRGWLNLPLGLSMEHEIYKASNTLRS--------------    292
tr|A0A2I0L5Z9|A0A2I0L5Z9_PUNGR    SI-SNAVQGAKHDVVDWTCTRGWLNLPVGLTMEHEIYKASNTLRS--------------    283
tr|A0A1R3JEB1|A0A1R3JEB1_COCAP    GYKSRAGRGSLKSAAK--DEDGMLNQILGADSKDSSSSGVASKNDKISSVQRAASSASGS    144
tr|A0A1S4AXM1|A0A1S4AXM1_TOBAC    TI-SNAVQAAKHDVMDWTCTRGWLNLPVGLSMEYEIYKSSNTLRT--------------    290
tr|A0A3L6PF97|A0A3L6PF97_PANMI    AA-NRP-IVHSHE-----DLAKKLQEAMDI-----------------------------    449
tr|D7KDX7|D7KDX7_ARALL            QV-SPAAQLPTHDLTDLSTLRSWVNFPWGQSMEYEIYKATNTIRGYI-T----------    302
tr|A0A218XH43|A0A218XH43_PUNGR    SI-SNAVQGAKHDVVDWTCTRGWLNLPVGLTMEHEIYKASNTLRS--------------    283
tr|A0A1S4AXX1|A0A1S4AXX1_TOBAC    TI-SNAVQAAKHDVMDWTCTRGWLNLPVGLSMEYEIYKSSNTLRT--------------    312
tr|A0A5N6P4Z3|A0A5N6P4Z3_9ASTR    AAASRSSGLQSHE-----DLAKKLQNLGLM-----------------------------    220
tr|V7BPT2|V7BPT2_PHAVU            HV-SNAAQLPTHDLTDLSTLRSWVNFPWGQSMEYEIYKATNTIKAY--N----------    344
tr|A0A6G1CV26|A0A6G1CV26_9ORYZ    KT-SRACQLPTNDLTDLSTLRSWLNLPWAGTMEYEIYKAVNSIYGYFK-----------    345
tr|A0A2S3HIS8|A0A2S3HIS8_9POAL    RF-SRACQLPTQDLTDLSTLRSWINIPWAIKMEYEIYKAANSIYGYCK-----------    342
tr|A0A2T7DXM5|A0A2T7DXM5_9POAL    RF-SRACQLPTQDLTDLSTLRSWINIPWAIKMEYEIYKAANSIYGYCK-----------    342
tr|A0A3L6PEE3|A0A3L6PEE3_PANMI    RF-SRACQLPTQDLTDLSTLRSWINIPWAIKMEYEIYKAANSICGYCK-----------    361
tr|A0A1S4AY23|A0A1S4AY23_TOBAC    TI-SNAVQAAKHDVMDWTCTRGWLNLPVGLSMEYEIYKSSNTLRT--------------    358
tr|A0A443PNH8|A0A443PNH8_9MAGN    SL-GKSAVQQSHE-----DLAKKLQEEMDR-----------------------------    512
tr|A0A5E4E302|A0A5E4E302_PRUDU    NI-SNASQAAKHDVMDWTCTRGWLNLPVGFSMEHEIYKASNTLRS--------------    289
tr|A0A446PFI6|A0A446PFI6_TRITD    SV-SNATQTAKHDVMDWTSARGWLNLPIGLTLEHEIYKAAVSIRS--------------    300
tr|A0A438E5E5|A0A438E5E5_VITVI    QV-SRAAQSPTYDLTDLSTLRSWLNFPWGQSMEYEIYKAANTIRNSF-S----------    157
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tr|A0A7J9AYN2|A0A7J9AYN2_9ROSI     SI-SNAAQVAKHDVMDWTCTRGWLNLPVGLSMEHEIYKASTTLRS--------------    289
tr|A0A067G5B6|A0A067G5B6_CITSI     TI-SNAVQVAKHDVVDWTCTRGWLNLPVGLSMEYEIYKASNTLRS--------------    261
tr|A0A6V7P3V7|A0A6V7P3V7_ANACO     SI-SNATQLAKHDVIDWTCARGWLNLPVGLSMDHEIYKAANTLRS--------------    228
tr|A0A2K3L4T2|A0A2K3L4T2_TRIPR     TI-SNSVQAAKHDVMDWTCARGWLNLPIGVSMEHEIYKASNTLRN--------------    292
tr|A0A5E4E497|A0A5E4E497_PRUDU     NI-SNASQAAKHDVMDWTCTRGWLNLPVGFSMEHEIYKASNTLRS--------------    289
tr|A0A1W0VTG3|A0A1W0VTG3_SORBI     RF-SRACQLPTQDLTDLSTLRSWINIPWAVRMEYEIYKAANSIHGYCG-----------    342
tr|A0A5K0Z6Z6|A0A5K0Z6Z6_9MAGN     KV-SHASQLATHDLTDLSTLRSWVNFPWGQSMEYEIYKATNTIRGYCK-----------    301
tr|A0A0A0LWS3|A0A0A0LWS3_CUCSA     SI-SNAVQRAKHDVMDWTCSRGWLNLPIGLSMEHEIYKASQTLRG--------------    274
tr|A0A1D6HX11|A0A1D6HX11_MAIZE     SV-SNASQTAKHDVMDWTCARGWLNFPIGLTMEHEIYKAANTLTS--------------    300
tr|A0A2H3XIR1|A0A2H3XIR1_PHODC     SN-SNAMQSAKHDVMDWTSTRGWLNLPVGLSMEHEIYKAANTLRS--------------    277
tr|A0A6P5GTM1|A0A6P5GTM1_ANACO     SI-SNATQLAKHDVIDWTCARGWLNLPVGLSMDHEIYKAANTLRS--------------    278
tr|A0A199VRL4|A0A199VRL4_ANACO     SI-SNATQLAKHDVIDWTCARGWLNLPVGLSMDHEIYKAANTLRS--------------    278
tr|A0A022QAU6|A0A022QAU6_ERYGU     TI-SNAAQVAKHDVMDWTCSRGWLNLPVGLSLEHEIYKSCNTLRS--------------    281
tr|A0A371GJB6|A0A371GJB6_MUCPR     TI-SNAAQVAKHDVMDWTCARGWINLPIGLSMEHEIYKASNTLRN--------------    288
tr|A0A251IZI6|A0A251IZI6_MANES     TI-SNAVQAAKHDVMDWTCTRGWLNLPVGLSMEHEIYKASNTLRS--------------    285
tr|A0A7J7HWK5|A0A7J7HWK5_CAMSI     TI-SNAVQVAKHDVMDWTSMRGWLNLPVGLSMEYEIYKSSNTLRS--------------    285
tr|A0A5C7GVA1|A0A5C7GVA1_9ROSI     SI-SNAVQVAKHDVVDWTCTRGWLNLPVGMSMEYEIYKASNTLRS--------------    287
tr|A0A1S2YPT9|A0A1S2YPT9_CICAR     TI-SNAVQVAKHDVMDWTSARGWLNLPIGLSMEHEIYKASNTLQN--------------    288
tr|A0A5N5I234|A0A5N5I234_9ROSA     SI-SNAAQAAKHDVMDWTCTRGWLNLPVGFSMEQEIYKASNTLRS--------------    289
tr|A0A7J9AWW0|A0A7J9AWW0_9ROSI     SI-SNAAQVAKHDVMDWTCTRGWLNLPVGLSMEHEIYKASTTLRS--------------    289
tr|A0A7J8NBC7|A0A7J8NBC7_9ROSI     SI-SNAAQVAKHDVMDWTCTRGWLNLPVGLSMEHEIYKASTTLRS--------------    289
tr|A0A7J8YJZ0|A0A7J8YJZ0_GOSAI     SI-SNAAQVAKHDVMDWTCTRGWLNLPVGLSMEHEIYKASTTLRS--------------    289
tr|A0A7J9MU50|A0A7J9MU50_GOSSC     SI-SNAAQVAKHDVMDWTCTRGWLNLPVGLSMEHEIYKASTTLRS--------------    289
tr|A0A5E4E3G6|A0A5E4E3G6_PRUDU     NI-SNASQAAKHDVMDWTCTRGWLNLPVGFSMEHEIYKASNTLRS--------------    289
tr|A0A4U6V1J0|A0A4U6V1J0_SETVI     RF-SRACQFPTQDLTDLSTLRSWINIPWATKMEYEIYKAANSIYGYCK-----------    346
tr|A0A3B6EB49|A0A3B6EB49_WHEAT     SV-SNATQTAKHDVMDWTSARGWLNLPIGLTLEHEIYKAAASLRS--------------    298
tr|A0A453E2E6|A0A453E2E6_AEGTS     SV-SNATQTAKHDVMDWTSARGWLNLPIGLTLEHEIYKAAVSLRS--------------    300
tr|A3BIJ2|A3BIJ2_ORYSJ            SI-SNATQTAKHDVMDWTSTRGWLNLPIGLTMEHEIYKAANSVRS--------------    299
tr|A2YK60|A2YK60_ORYSI            SI-SNATQTAKHDVMDWTSTRGWLNLPIGLTMEHEIYKAANSVRS--------------    299
tr|A0A0E0LJ79|A0A0E0LJ79_ORYPU     SI-SNATQTAKHDVMDWTSTRGWLNLPIGLTMEHEIYKAANSVRS--------------    299
tr|A0A2S3GXE8|A0A2S3GXE8_9POAL     SV-SNASQTAKHDVMDWTCARGWLNLPIGLTMEHEIYKAANTLMS--------------    300
tr|A0A3B6FGI8|A0A3B6FGI8_WHEAT     SV-SNATQTAKHDVMDWTSARGWLNLPIGLTLEHEIYKAAVSIRS--------------    300
tr|A0A3B6GNS6|A0A3B6GNS6_WHEAT     SV-SNATQTAKHDVMDWTSARGWLNLPIGLTLEHEIYKAAVSLRS--------------    300
tr|C5X3I0|C5X3I0_SORBI            SV-SNASQTAKHDVMDWTCARGWLNLPIGLTMEHEIYKAANTLSS--------------    300
tr|A0A2T7EN04|A0A2T7EN04_9POAL     SV-SNASQTAKHDVMDWTCARGWLNLPIGLTMEHEIYKAANTLMS--------------    300
tr|A0A453E2Q5|A0A453E2Q5_AEGTS     SV-SNATQTAKHDVMDWTSARGWLNLPIGLTLEHEIYKAAVSLRS--------------    300
tr|M8BMH1|M8BMH1_AEGTA            SV-SNATQTAKHDVMDWTSARGWLNLPIGLTLEHEIYKAAVSLRS--------------    300
tr|A0A0E0AHZ8|A0A0E0AHZ8_9ORYZ     SI-SNATQTAKHDVMDWTSTRGWLNLPIGLTMEHEIYKAANSVRS--------------    301
tr|A0A0E0EA20|A0A0E0EA20_9ORYZ     SI-SNATQTAKHDVMDWTSMRGWLNLPIGLTMEHEIYKAANSVRS--------------    301
tr|A0A0E0Q6I8|A0A0E0Q6I8_ORYRU     SI-SNATQTAKHDVMDWTSTRGWLNLPIGLTMEHEIYKAANSVRS--------------    301
tr|I1Q9P1|I1Q9P1_ORYGL            SI-SNATQTAKHDVMDWTSTRGWLNLPIGLTMEHEIYKAANSVRS--------------    301
tr|A0A0P0X4Z1|A0A0P0X4Z1_ORYSJ     SI-SNATQTAKHDVMDWTSTRGWLNLPIGLTMEHEIYKAANSVRS--------------    301
tr|Q6Z4J7|Q6Z4J7_ORYSJ            SI-SNATQTAKHDVMDWTSTRGWLNLPIGLTMEHEIYKAANSVRS--------------    301
tr|A0A0D3GPH8|A0A0D3GPH8_9ORYZ     SI-SNATQTAKHDVMDWTSTRGWLNLPIGLTMEHEIYKAANSVRS--------------    301
tr|A0A5J9VT31|A0A5J9VT31_9POAL     SV-SNASQTAKHDVMDWTCSRGWLNLPIGLTMEHEIYKAANSLRI--------------    302
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tr|A0A5J9VVN9|A0A5J9VVN9_9POAL    SV-SNASQTAKHDVMDWTCSRGWLNLPIGLTMEHEIYKAANSLRI--------------    302
tr|A0A2S3HG76|A0A2S3HG76_9POAL    AA-NRP-IVHSHE-----DLAKKLQEAMDI-----------------------------    443
tr|A0A2T7DU10|A0A2T7DU10_9POAL    AA-NRP-IVHSHE-----DLAKKLQEAMDI-----------------------------    445
tr|T1L7X1|T1L7X1_TRIUA            SV-SNATQTAKHDVMDWTSARGWLNLPIGLTLEHEIYKAAVSLRS--------------    298
tr|A0A446N5P4|A0A446N5P4_TRITD    SV-SNATQTAKHDVMDWTSARGWLNLPIGLTLEHEIYKAAASLRS--------------    298
tr|I1GY35|I1GY35_BRADI            KI-SRACQLPTKDLTDLSTLRSWINIPWAHTMEYEIYKAANSIHGYCK-----------    332
tr|A0A0R0FGY4|A0A0R0FGY4_SOYBN    TI-SNAAQGAKHDVMDWTCARGWINLPIGLSMEHEIYKASNTLRN--------------    288
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Nonhuman mammals

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sp|Q9H8W4|PKHF2_HUMAN            ----------------NDMSDDDDDDDS--SD--------------------------    249
tr|G3RXJ3|G3RXJ3_GORGO           ----------------NDMSDDDDDDDS--SD--------------------------    249
tr|A0A2R8ZRE3|A0A2R8ZRE3_PANPA   ----------------NDMSDDDDDDDS--SD--------------------------    249
tr|A0A6D2WS13|A0A6D2WS13_PANTR   ----------------NDMSDDDDDDDS--SD--------------------------    249
tr|H2QWG2|H2QWG2_PANTR           ----------------NDMSDDDDDDDS--SD--------------------------    249
tr|A0A2K6B0W2|A0A2K6B0W2_MACNE   ----------------NDMSDDDDDDDS--SD--------------------------    249
tr|A0A2K6JSQ3|A0A2K6JSQ3_RHIBE   ----------------NDMSDDDDDDDS--SD--------------------------    249
tr|A0A2K5UMP8|A0A2K5UMP8_MACFA   ----------------NDMSDDDDDDDS--SD--------------------------    249
tr|G7PC92|G7PC92_MACFA           ----------------NDMSDDDDDDDS--SD--------------------------    249
tr|A0A2I3GPW4|A0A2I3GPW4_NOMLE   ----------------NDMSDDDDDDDS--SD--------------------------    249
tr|A0A2K5XAN3|A0A2K5XAN3_MANLE   ----------------NDMSDDDDDDDS--SD--------------------------    249
tr|A0A2K5KIW2|A0A2K5KIW2_CERAT   ----------------NDMSDDDDDDDS--SD--------------------------    249
tr|A0A2J8UGL7|A0A2J8UGL7_PONAB   ----------------NDMSDDDDDDDS--SD--------------------------    249
tr|G7MZT0|G7MZT0_MACMU           ----------------NDMSDDDDDDDS--SD--------------------------    249
tr|A0A2K5PKC3|A0A2K5PKC3_CEBIM   ----------------NDMSDDDDDDDS--SD--------------------------    249
tr|A0A2K6NLA2|A0A2K6NLA2_RHIRO   ----------------NDMSDDDDDDDS--SD--------------------------    249
tr|F7ASZ1|F7ASZ1_MACMU           ----------------NDMSDDDDDDDS--SD--------------------------    249
tr|A0A6J3FGX3|A0A6J3FGX3_SAPAP   ----------------NDMSDDDDDDDS--SD--------------------------    249
tr|A0A6D2X014|A0A6D2X014_PONAB   ----------------NDMSDDDDDDDS--SD--------------------------    249
tr|A0A6I9ICZ8|A0A6I9ICZ8_VICPA   ----------------NDVSDDDDDDDS--SD--------------------------    249
tr|S9WGC9|S9WGC9_CAMFR           ----------------NDVSDDDDDDDS--SD--------------------------    249
tr|A0A5N4CHZ2|A0A5N4CHZ2_CAMDR   ----------------NDVSDDDDDDDS--SD--------------------------    249
tr|A0A2K5HBE8|A0A2K5HBE8_COLAP   ----------------NDMSDDDDDDDS--SD--------------------------    249
tr|A0A2K5C657|A0A2K5C657_AOTNA   ----------------NDMSDDDDDDDS--SD--------------------------    249
tr|A0A096MLM1|A0A096MLM1_PAPAN   ----------------NDMSDDDDDDDS--SD--------------------------    249
tr|F7FEC3|F7FEC3_CALJA           ----------------NDMSDDDDEDDS--SD--------------------------    249
tr|A0A0D9SB87|A0A0D9SB87_CHLSB   ----------------NDMSDDDDDDDS--SD--------------------------    249
tr|A0A2K6S793|A0A2K6S793_SAIBB   ----------------NDMSDDDDDDDS--SD--------------------------    249
tr|A0A3Q7TWS2|A0A3Q7TWS2_VULVU   ----------------NDVSDDDDDDDS--SD--------------------------    249
tr|A0A1S3AB18|A0A1S3AB18_ERIEU   ----------------NDVSDDDDDDDS--SD--------------------------    249
tr|A0A5E4BFX5|A0A5E4BFX5_MARMO   ----------------NDVSDDDDDDDS--SD--------------------------    249
tr|I3MAC4|I3MAC4_ICTTR           ----------------NDVSDDDDDDDS--SD--------------------------    249
tr|A0A1U7T0A4|A0A1U7T0A4_CARSF   ----------------NDVSDDDDDDDS--SD--------------------------    249
tr|A0A2K6ERG1|A0A2K6ERG1_PROCO   ----------------NDVSDDDDDDDS--SD--------------------------    249
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tr|A0A6I9JBJ2|A0A6I9JBJ2_CHRAS     ----------------NDVSDDDDDDDS--SD------------------------     249
tr|A0A3Q7P8U5|A0A3Q7P8U5_CALUR     ----------------NDVSDDDDDDDS--SD------------------------     249
tr|A0A3P4LK23|A0A3P4LK23_GULGU     ----------------NDVSDDDDDDDS--SD------------------------     249
tr|M3Z4K3|M3Z4K3_MUSPF             ----------------NDVSDDDDDDDS--SD------------------------     249
tr|A0A485MJJ6|A0A485MJJ6_LYNPA     ----------------NDVSDDDDDDDS--SD------------------------     249
tr|A0A667IBC1|A0A667IBC1_LYNCA     ----------------NDVSDDDDDDDS--SD------------------------     249
tr|A0A4X1U327|A0A4X1U327_PIG       ----------------NDVSDDDDDDDS--SD------------------------     249
tr|U6CRZ6|U6CRZ6_NEOVI             ----------------NDVSDDDDDDDS--SD------------------------     249
tr|A0A2Y9EYL3|A0A2Y9EYL3_PHYMC     ----------------NDVSDDDDDDDS--SD------------------------     249
tr|M3WVQ3|M3WVQ3_FELCA             ----------------NDVSDDDDDDDS--SD------------------------     249
tr|A0A7J8DUD9|A0A7J8DUD9_MOLMO     ----------------NDVSDDDDDDDS--SD------------------------     249
tr|A0A6P6HRR1|A0A6P6HRR1_PUMCO     ----------------NDVSDDDDDDDS--SD------------------------     249
tr|A0A287ASA9|A0A287ASA9_PIG       ----------------NDVSDDDDDDDS--SD------------------------     249
tr|A0A6J1ZRF1|A0A6J1ZRF1_ACIJB     ----------------NDVSDDDDDDDS--SD------------------------     249
tr|A0A6P4WXG5|A0A6P4WXG5_PANPR     ----------------NDVSDDDDDDDS--SD------------------------     249
tr|A0A5N3XBU7|A0A5N3XBU7_MUNRE     ----------------NDVSDDDDDDDS--SD------------------------     249
tr|A0A5N3WEU8|A0A5N3WEU8_MUNMU     ----------------NDVSDDDDDDDS--SD------------------------     249
tr|L8ILX8|L8ILX8_9CETA             ----------------NDVSDDDDDDDS--SD------------------------     249
tr|A4IFN8|A4IFN8_BOVIN             ----------------NDVSDDDDDDDS--SD------------------------     249
tr|A0A4W2EB56|A0A4W2EB56_BOBOX     ----------------NDVSDDDDDDDS--SD------------------------     249
tr|A0A6P5CTL6|A0A6P5CTL6_BOSIN     ----------------NDVSDDDDDDDS--SD------------------------     249
tr|A0A6J0WJ70|A0A6J0WJ70_ODOVR     ----------------NDVSDDDDDDDS--SD------------------------     249
tr|A0A6P3GQJ4|A0A6P3GQJ4_BISBI     ----------------NDVSDDDDDDDS--SD------------------------     249
tr|A0A2U3WPC7|A0A2U3WPC7_ODORO     ----------------NDVSDDDDDDDS--SD------------------------     249
tr|A0A7J7VF05|A0A7J7VF05_RHIFE     ----------------NDVSDDDDDDDS--SD------------------------     249
tr|L5KAU6|L5KAU6_PTEAL             ----------------NDVSDDDDDDDS--SD------------------------     249
tr|A0A6P3QVM8|A0A6P3QVM8_PTEVA     ----------------NDVSDDDDDDDS--SD------------------------     249
tr|A0A2Y9PAZ8|A0A2Y9PAZ8_DELLE     ----------------NDVSDDDDDDDS--SD------------------------     249
tr|G1PK15|G1PK15_MYOLU             ----------------NDVSDDDDDDDS--SD------------------------     249
tr|A0A7J7TK50|A0A7J7TK50_MYOMY     ----------------NDVSDDDDDDDS--SD------------------------     249
tr|A0A2Y9GX76|A0A2Y9GX76_NEOSC     ----------------NDVSDDDDDDDS--SD------------------------     249
tr|L5MHS6|L5MHS6_MYODS             ----------------NDVSDDDDDDDS--SD------------------------     249
tr|A0A2U3XES2|A0A2U3XES2_LEPWE     ----------------NDVSDDDDDDDS--SD------------------------     249
tr|A0A7J7VN67|A0A7J7VN67_PIPKU     ----------------NDVSDDDDDDDS--SD------------------------     249
tr|A0A452QFV9|A0A452QFV9_URSAM     ----------------NDVSDDDDDDDS--SD------------------------     249
tr|A0A6G1APQ5|A0A6G1APQ5_CROCR     ----------------NDVSDDDDDDDS--SD------------------------     249
tr|A0A340WWB4|A0A340WWB4_LIPVE     ----------------NDVSDDDDDDDS--SD------------------------     249
tr|A0A3Q7WAC4|A0A3Q7WAC4_URSAR     ----------------NDVSDDDDDDDS--SD------------------------     249
tr|A0A250XXA1|A0A250XXA1_CASCN     ----------------NDVSDDDDDDDS--SD------------------------     249
tr|G9KH59|G9KH59_MUSPF             ----------------NDVSDDDDDDDS--S-------------------------     248
tr|A0A1U7QHL5|A0A1U7QHL5_MESAU     ----------------NDVSDDDDDDDS--SD------------------------     249
tr|A0A452CBQ1|A0A452CBQ1_BALAS     ----------------NDVSDDDDDDDS--SD------------------------     249
tr|A0A2Y9QET1|A0A2Y9QET1_TRIMA     ----------------NDVSDDDDDDDS--SD------------------------     249
tr|A0A6P5PKF8|A0A6P5PKF8_MUSCR     ----------------NDASDDDDDDDS--SD------------------------     249
tr|A0A341CEL5|A0A341CEL5_NEOAA     ----------------NDVSDDDDDDDS--SD------------------------     249
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tr|A0A484GRA3|A0A484GRA3_SOUCH      ----------------NDVSDDDDDDDS--SD------------------------     249
tr|A0A7J8C3Q9|A0A7J8C3Q9_ROUAE      ----------------NDVSDDDDDDDS--SD------------------------     249
tr|A0A384BXS8|A0A384BXS8_URSMA      ----------------NDVSDDDDDDDS--SD------------------------     249
tr|A0A2U4AI60|A0A2U4AI60_TURTR      ----------------NDVSDDDDDDDS--SD------------------------     249
tr|A0A2Y9J9Y4|A0A2Y9J9Y4_ENHLU      ----------------NDVSDDDDDDDS--SD------------------------     249
tr|L8YGB7|L8YGB7_TUPCH              ----------------NDVSDDDDDDDS--SD------------------------     250
tr|G3UCQ4|G3UCQ4_LOXAF              ----------------NDVSDDDDDDDS--SD------------------------     249
tr|D2HVB5|D2HVB5_AILME              ----------------NDVSDDDDDDDS--SD------------------------     249
tr|A0A6I9L8U8|A0A6I9L8U8_PERMB      ----------------NDVSDDDDDDDS--SD------------------------     249
tr|A0A1S3EVN9|A0A1S3EVN9_DIPOR      ----------------NDGSDDDDDDS--SD------------------------     249
tr|A0A2K5C233|A0A2K5C233_AOTNA      ----------------NDMSDDDDDDS--SD------------------------     249
tr|H0Y0B3|H0Y0B3_OTOGA              ----------------NDVSDDDDDDS--SD------------------------     249
tr|A0A6J2NCI4|A0A6J2NCI4_9CHIR      ----------------NDVSDDDDDDS--SD------------------------     249
sp|Q91WB4|PKHF2_MOUSE              ----------------NDASDDDDDDS--SD------------------------     249
tr|A0A7J7EHJ9|A0A7J7EHJ9_DICBM      ----------------NDVSDDDDDDS--SD------------------------     249
tr|K9IHW6|K9IHW6_DESRO              ----------------NDVSDDDDDDS--SD------------------------     249
tr|A0A452DYL3|A0A452DYL3_CAPHI      ----------------NDVSDDDDDDS--SD------------------------     249
tr|A0A3Q2HWW6|A0A3Q2HWW6_HORSE      ----------------NDVSDDDDDDS--SD------------------------     249
tr|W5PZ70|W5PZ70_SHEEP              ----------------NDVSDDDDDDDS--SD------------------------     249
tr|A0A6P7ECY0|A0A6P7ECY0_SHEEP      ----------------NDVSDDDDDDDS--SD------------------------     249
tr|B1WBV4|B1WBV4_RAT                ----------------NDASDDDDDDDS--SD------------------------     249
tr|A0A6J2F8G3|A0A6J2F8G3_ZALCA      ----------------NDVSDDDDDDDS--SD------------------------     248
tr|A0A7N4NQ24|A0A7N4NQ24_SARHA      ----------------NNVSDDEDDEDS--SD------------------------     249
tr|A0A6P5IQU3|A0A6P5IQU3_PHACI      ----------------NNVSDDEDDEDS--SD------------------------     249
tr|A0A286XYJ1|A0A286XYJ1_CAVPO      ----------------NNVSDDDDDDSS--D------------------------     248
tr|A0A5E4BEY9|A0A5E4BEY9_MARMO      ----------------NDVLDDDDDDDS--SD------------------------     249
tr|A0A091DW22|A0A091DW22_FUKDA      ----------------NDVSDDEDDDSS--D------------------------     248
tr|A0A0P6K1S8|A0A0P6K1S8_HETGA      ----------------NNVSDDEDDDSS--D------------------------     248
tr|F7A285|F7A285_ORNAN              ----------------NNTSDDDDDDSS--SD------------------------     249
tr|F6Q9Z2|F6Q9Z2_MONDO             ----------------NNVSDDED------DEDSS----------D-----------     543
tr|A0A6P3FWN8|A0A6P3FWN8_OCTDE      ----------------NDVSDDDEEDSS--D------------------------     248
tr|A0A6A1QJM0|A0A6A1QJM0_BALPH      ----------------NDVSDDDDDDDD--DDDDD----------SSD----------     255
tr|A0A673V5I4|A0A673V5I4_SURSU      ----------------NQHYLKKTMKTE--KC------------------------     249
tr|A0A6J0YZI7|A0A6J0YZI7_ODOVR      --------------------------------------------------------     229
tr|F7F262|F7F262_MONDO             ------CSTL-SYW---LQ------------------------------------     238
tr|A0A5F8H7A3|A0A5F8H7A3_MONDO      ------CQSK-G-----RDVRTASPGTGS--QVQSA----------DSFPV---------     259
tr|A0A5F8GYD7|A0A5F8GYD7_MONDO      ISILAILAAI-SYL---FPPGTHTPHSGS--SE------------------------     264
tr|A8Y5N8|A8Y5N8_MOUSE             --------------------------------------------------------     197
tr|A0A5N3XKB2|A0A5N3XKB2_MUNRE      ----------------NDVSDDDD------DDSSD--------------------     213
tr|A0A1A6FXD9|A0A1A6FXD9_NEOLE      ----------------NDVSDDDD------DDDSS---------D-----------     227
tr|A0A6B0RRU8|A0A6B0RRU8_9CETA      ----------------NDVSDDDD------DDDSS---------D-----------     465
tr|A0A5N3UY12|A0A5N3UY12_MUNMU      ----------------NDVSDDDD------DDDDD----------SSD----------     204
tr|A0A0D9SB08|A0A0D9SB08_CHLSB      HLTGPICGASSG---DDDDSDEDKEGSRD--GDWPSRVEFY--GSGVAWSAFHS------     279
tr|A0A2J8KSM2|A0A2J8KSM2_PANTR      HLAGPICGASSG---DDDDSDEDKEGSRD--GDWPSRVEFY--ASGVAWSAFHS------     279
sp|Q96S99|PKHF1_HUMAN              HLARPICGASSG---DDDDSDEDKEGSRD--GDWPSSVEFY--ASGVAWSAFHS------     279
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tr|A0A2K5JGW8|A0A2K5JGW8_COLAP    HLTRPICGASSG---DDDDSDEDKEGSRD--GDWPSRVEFY--GSGVAWSAFHS------    279
tr|A0A2K6CYZ9|A0A2K6CYZ9_MACNE    HLTRPICGASSG---DDDDSDEDKEGSRD--GDWPSRVEFY--GSGVAWSAFHS------    279
tr|A0A2K6JWD4|A0A2K6JWD4_RHIBE    HLTRPICGASSG---DDDDSDEDKEGSRD--GDWPSRVEFY--GSGVAWSAFHS------    279
tr|A0A2K5UDM0|A0A2K5UDM0_MACFA    HLTRPICGASSG---DDDDSDEDKEGSRD--GDWPSHVEFY--GSGVAWSAFHS------    279
tr|G3QH50|G3QH50_GORGO            HLARPICGASSG---DDDDSDEDKEGSRD--GDWPSRVEFY--ASGVAWSAFHS------    279
tr|A0A2I3G625|A0A2I3G625_NOMLE    HLARPICGASSG---DDDDSDEDKEGSRD--GDWPSRVEFY--ASGVAWSAFHS------    279
tr|A0A2K5XLS1|A0A2K5XLS1_MANLE    HLTRPICGASSG---DDDDSDEDKEGSRD--GDWPSRVEFY--GSGVAWSAFHS------    279
tr|A0A0A0MVG7|A0A0A0MVG7_PAPAN    HLTRPICGASSG---DDDDSDEDKEGSRD--GDWPSRVEFY--GSGVAWSAFHS------    279
tr|A0A2K5KX81|A0A2K5KX81_CERAT    HLTRPICGASSG---DDDDSDEDKEGSRD--GDWPSRVEFY--GSGVAWSAFHS------    279
tr|G7NLE7|G7NLE7_MACMU            HLTRPICGASSG---DDDDSDEDKEGSRD--GDWPSRVEFY--GSGVAWSAFHS------    279
tr|A0A2K6NPM4|A0A2K6NPM4_RHIRO    HLTRPICGASSG---DDDDSDEDKEGSRD--GDWPSRVEFY--GSGVAWSAFHS------    279
tr|F6WEV7|F6WEV7_MACMU            HLTRPICGASSG---DDDDSDEDKEGSRD--GDWPSRVEFY--GSGVAWSAFHS------    279
tr|H2QFY5|H2QFY5_PANTR            HLARPICGASSG---DDDDSDEDKEGSRD--GDWPSRVEFY--ASGVAWSAFHS------    279
tr|A0A2J8SAC5|A0A2J8SAC5_PONAB    HLARPICGASSG---DDDDSDEDKEGSRD--GDWPSRVEFY--ASGVAWSAFHS------    279
tr|A0A6D2Y8X4|A0A6D2Y8X4_PONAB    HLARPICGASSG---DDDDSDEDKEGSRD--GDWPSRVEFY--ASGVAWSAFHS------    279
tr|G7PX49|G7PX49_MACFA            HLTRPICGASSG---DDDDSDEDKEGSRD--GDWPSRVEFY--GSGVAWSAFHS------    279
tr|A0A2R9AA53|A0A2R9AA53_PANPA    HLAGPICGASSG---DDDDSDEDKEGSRD--GDWPSRVEFY--ASGVAWSAFHS------    364
tr|B4DWN9|B4DWN9_HUMAN            HLARPICGASSG---DDDDSDEDKEGSRD--GDWPSSVEFY--ASGVAWSAFHS------    364
tr|L8IB21|L8IB21_9CETA           HLAGAVCGASSG---DDDDSDEDREGSGD--GDWPSHVEFY--ASGVSWSSFHS------    279
tr|A2VE19|A2VE19_BOVIN           HLAGAVCGASSG---DDDDSDEDREGSGD--GDWPSHVEFY--ASGVSWSSFHS------    279
tr|A0A4W2H1W7|A0A4W2H1W7_BOBOX   HLAGAVCGASSG---DDDDSDEDREGSGD--GDWPSHVEFY--ASGVSWSSFHS------    279
tr|A0A6P5DDG5|A0A6P5DDG5_BOSIN   HLAGAVCGASSG---DDDDSDEDREGSGD--GDWPSHVEFY--ASGVSWSSFHS------    279
tr|A0A091D210|A0A091D210_FUKDA   HLGGAFYGASSGDDGDDDDSDEDKEGSRD--GDWPSRVQFY--ASGVSWSAFHS------    282
tr|A0A6B0R7Q5|A0A6B0R7Q5_9CETA   HLAGAVCGASSG---DDDDSDEDREGSGD--GDWPSHVEFY--ASGVSWSSFHS------    298
tr|A0A2K5PK00|A0A2K5PK00_CEBIM   HLTRAICGASSG---DDDDSDEDKEGSGD--GDWSSRVEFY--SSGVAWSAFHS------    279
tr|A0A1U7R682|A0A1U7R682_MESAU   LGG-TVSGASSG---DDDDSDEDREGSGD--GDWPSQVEFY--TSGVSWSAFHS------    279
tr|A0A2K6SFK7|A0A2K6SFK7_SAIBB   HLARAICGASSG---DDDDSDEDKEGSGD--GDWSSRVEFY--SSGVAWSAFHS------    279
tr|A0A2K5E2Y5|A0A2K5E2Y5_AOTNA   HLARAICGASSG---DDDDSDEDKEGSGD--GDWSSRVEFY--SSGVAWSAFHS------    279
tr|U3D2H9|U3D2H9_CALJA            HLARAICGASSG---DDDDSDEDKEGSGD--GDWSSRVEFY--SSGVAWSAFHS------    279
tr|A0A6J3FHK1|A0A6J3FHK1_SAPAP   HLTRAICGASSG---DDDDSDEDKEGSGD--GDWSSRVEFY--SSGVAWSAFHS------    279
tr|H0XH62|H0XH62_OTOGA           LAGAVCGGASSG---DDDDSEEDREGGGD--GDWPSSVEFY--ASDVSWSAFHS------    280
tr|A0A6J1Y5U6|A0A6J1Y5U6_ACIJB   YLAGAICGASSG---DDDDSDEDKEGSGD--GDWPSHVEFY--ASGVSWSSFHS------    279
tr|A0A7N4PT60|A0A7N4PT60_SARHA   HPPATTYGASSGED-ESDKSDEDKDGGSA--GSWPMGLEFY--ASGVKWSSFHS------    284
tr|A0A6P3YLF4|A0A6P3YLF4_SHEEP   YLAGAVCGASSG---DDDDSDEDREGSGD--GDWPSHVEFY--ASGVSWSSFHS------    279
tr|G5BL44|G5BL44_HETGA            HLGGAFYGASSGDDGDDDDSDEDKEGSRD--GDWPSRVQFY--ASGVSWSAFHS------    282
tr|A0A5K1U7A2|A0A5K1U7A2_CALJA   HLARAICGASSG---DDDDSDEDKEGSGD--GDWSSRVEFY--SSGNAFPFRKPQ-----    280
tr|A0A7J8CA60|A0A7J8CA60_MOLMO   SPARASCGASSGD--DDDDSDEDKEGSGD--GDWPGHVKFY--DSGVSWSSFHS------    275
sp|Q68FU1|PKHF1_RAT               LGS-TMCGASSG---DDDDSDEDREGSGD--GDWPTQVEFY--ASGVSWSAFHS------    279
tr|A0A5J5MWL9|A0A5J5MWL9_MUNRE   YLAGAVCGASSG---DDDDSDEDREGSGD--ADWPSRVEFY--ASGVSWSSFHS------    279
tr|A0A5N3VFQ3|A0A5N3VFQ3_MUNMU   YLAGAVCGASSG---DDDDSDEDREGSGD--ADWPSRVEFY--ASGVSWSSFHS------    279
tr|A0A452DRQ5|A0A452DRQ5_CAPHI   YLAGAVCGASSG---DDDDSDEDREGSGD--GDWPSHVEFY--ASGVSWSSFHS------    279
tr|A0A6J0XTU7|A0A6J0XTU7_ODOVR   YLAGAVCGASSG---DDDDSDEDREGSGD--ADWPSRVEFY--ASGVSWSSFHS------    279
tr|A0A1S3AR32|A0A1S3AR32_ERIEU   ---AHLVGASSG---DDDDSDEDKEGGGD--GDWPGQVKFY--ASN-IWSSFHS------    272
tr|A0A7N4NQK3|A0A7N4NQK3_SARHA   HPPATTYGASSGED-ESDKSDEDKDGGSA--GSWPMGLEFY--ASGVKWSSFHS------    317
tr|A0A6P5K5Z3|A0A6P5K5Z3_PHACI   HSRGTTYGASSGED-ESDKSDEEKDGGSA--GSWPTGVEFY--ASGVKWSSFHS------    285
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tr|A0A286XEI1|A0A286XEI1_CAVPO    HLGGALYGASSGDD----DSDEDKEGSRD--GDWPSRVQFY--ASSVSWSAFHS------    278
tr|A0A6P5K5R9|A0A6P5K5R9_PHACI    HSRGTTYGASSGED-ESDKSDEEKDGGSA--GSWPTGVEFY--ASGVKWSSFHS------    303
tr|A0A6J0XTS7|A0A6J0XTS7_ODOVR    YLAGAVCGASSG---DDDDSDEDREGSGD--ADWPSRVEFY--ASGVSWSSFHS------    320
tr|A0A485NDJ2|A0A485NDJ2_LYNPA    YLAGAICGASSG---DDDDSDEDKEGSGD--GDWPSHVEFY--ASGVSWSSFHS------    283
tr|A0A667J1S0|A0A667J1S0_LYNCA    YLAGAICGASSG---DDDDSDEDKEGSGD--GDWPSHVEFY--ASGVSWSSFHS------    283
tr|A0A4X2L5D8|A0A4X2L5D8_VOMUR    HSQGTTYGASSGED-ESDKSDEEKDGGSA--GSWPTGLEFY--ASGVKWSSFHS------    285
tr|A0A6P5K760|A0A6P5K760_PHACI    HSRGTTYGASSGED-ESDKSDEEKDGGSA--GSWPTGVEFY--ASGVKWSSFHS------    318
tr|M3WT21|M3WT21_FELCA            YLAGAICGASSG---DDDDSDEDKEGSGD--GDWPSHVEFY--ASGVSWSSFHS------    280
tr|A0A6P6H4E9|A0A6P6H4E9_PUMCO    YLAGAICGASSG---DDDDSDEDKEGSGD--GDWPSHVEFY--ASGVSWSSFHS------    281
tr|A0A6P4TXR5|A0A6P4TXR5_PANPR    YLAGAICGASSG---DDDDSDEDKEGSGD--GDWPSRVEFY--ASGVSWSSFHS------    281
tr|A0A2U3X5H7|A0A2U3X5H7_ODORO    -SAGAGCGASSG---DEEDSDEDKEGSGD--GDWPSRVEFY--ASGTSWSAFHS------    277
tr|A0A6G1B9W0|A0A6G1B9W0_CROCR    YLAGAVCGASSG---DDDDSDEDKEGSGD--GDWPSQVEFY--ASGVSWSSFHS------    280
tr|A0A6J0E1B0|A0A6J0E1B0_PERMB    LGG-AVCGASSG---DDDDSDEDREGSGD--GDWPSQVEFY--ASDVSWSAFHS------    279
tr|F7EZS4|F7EZS4_MONDO            HSPGTTYGVSSGED-ESDKSDEDKDGGSS--GSWPMGLEFY--ATGVKWSSFHS------    303
tr|A0A6J0DUG8|A0A6J0DUG8_PERMB    LGG-AVCGASSG---DDDDSDEDREGSGD--GDWPSQVEFY--ASDVSWSAFHS------    286
tr|A0A2Y9HYM5|A0A2Y9HYM5_NEOSC    -AAGAGCGASSG---DEEDSDEDKEGSGA--GDWPSRVEFY--ASGASWSAFHS------    277
tr|A0A2U3Y6L0|A0A2U3Y6L0_LEPWE    -AAGAGCGASSG---DEEDSDEDKEGSGA--GDWPSRVEFY--ASGASWSAFHS------    277
tr|A0A5E4BQ75|A0A5E4BQ75_MARMO    HLGGAFCGASSG---DDDDSDEDREGSRD--GDWPSHVEFY--TSGVSWSAFHS------    279
tr|I3N3T1|I3N3T1_ICTTR            HLGGAFCGASSG---DDDDSDEDREGSRD--GDWPSHVEFY--TSGVSWSAFHS------    279
tr|F7AL15|F7AL15_ORNAN            LR------LAVG-------------GTA--AYLNHALQ-------------------    243
tr|A0A6J0E1A5|A0A6J0E1A5_PERMB    LGG-AVCGASSG---DDDDSDEDREGSGD--GDWPSQVEFY--ASDVSWSAFHS------    296
tr|A0A3Q7MSJ7|A0A3Q7MSJ7_CALUR    -SAGAGCEASSG---DEEDSDEDKEGNGD--GDWPSSVEFY--ASGASWSAFHS------    277
tr|A0A6J2F2G5|A0A6J2F2G5_ZALCA    -SAGAGCGASSG---DEEDSDEDKEGNGD--GDWPSGVEFY--ASGASWSAFHS------    277
tr|A0A6P6EYH5|A0A6P6EYH5_OCTDE    HLGAAFYGASSGDD----DSDEDKEGSRD--GDWPSHVQFY--ASSVSWSAFHS------    278
sp|Q3TB82|PKHF1_MOUSE             LGG-TVCGASSG---DDDDSDEDREGNGD--GDWPTQVEFY--ASGVSWSAFHS------    279
tr|A0A061HTX9|A0A061HTX9_CRIGR    LGGGTVYGASSG---DDDDSDDDREGSGD--GDWPSQVEFY--TSGVSWSAFHS------    280
tr|A0A671FB93|A0A671FB93_RHIFE    AGSRALCGASSGD--EDEDSDEDREGSGD--GDWPSRVQFY--SSGVSWSSFHS------    274
tr|A0A341AK17|A0A341AK17_NEOAA    YLAGAVCGASSG---DDDDSDEDRESSGD--GDWPSRVEFY--ASGVTWSSFHS------    279
tr|A0A340YG10|A0A340YG10_LIPVE    YLAGAVCGASSG---DDDDSDEDREGSGD--GDWPSRVEFY--ASGVSWSSFHS------    279
tr|A0A5N4DR82|A0A5N4DR82_CAMDR    YLAGAVCGASSG---EDDDSDEDKEGSGD--GDWPSRVEFY--ASGVSWSSFHS------    279
tr|A0A4U1EUS3|A0A4U1EUS3_MONMO    YLAGAVCGASSG---DDDDSDEDREGSGD--GDWPSRVEFY--ASGVTWSSFHS------    279
tr|A0A2Y9P694|A0A2Y9P694_DELLE    YLAGAVCGASSG---DDDDSDEDREGSGD--GDWPSRVEFY--ASGVTWSSFHS------    279
tr|A0A2U3V2U0|A0A2U3V2U0_TURTR    YVAGAVCGASSG---DDDDSDEDREGSGD--GDWPSRVEFY--ASGVSWSSFHS------    279
tr|A0A3Q7TL14|A0A3Q7TL14_VULVU    YLGGAECGASSG---DDEDSDEDKEGGGD--GDWPSRVEFY--ASGVSWSAFHS------    283
tr|G1ML40|G1ML40_AILME            ----------------------------------------------------------    224
tr|A0A6P7R571|A0A6P7R571_MUSCR    LGG-TVCGASSG---DDDDSDEDREGNGD--GDWPTQVEFY--ASGVSWSAFHS------    279
tr|A0A3P4S7D1|A0A3P4S7D1_GULGU    YLPGAGAGASSG---DEEDSDEDREGSGD--GDWPSHVEFY--ASGVSWSAFHS------    281
tr|A0A6P3V9N9|A0A6P3V9N9_OCTDE    HLGAAFYGASSGDD----DXDEDKEGSRD--GDWPSHVQFY--ASSVSWSAFHS------    278
tr|M3Z5G8|M3Z5G8_MUSPF            YLSGAGTGASSG---DEEDSDEDKEGSGD--SNWSSRVEFY--ASGVSWSAFHS------    285
tr|D2H395|D2H395_AILME            YLAGAVCGASS-----------------------------------------------    243
tr|A0A383YQU7|A0A383YQU7_BALAS    YLAGAVCGASSG---DDDDSDEDREGSGD--GDWPSRVEFY--ASGVSWSSFHS------    279
tr|A0A2Y9F4I2|A0A2Y9F4I2_PHYMC    YLAGAVCGASSG---DDDDSDEDREGSGD--GDWPSRVEFY--ASGVSWSSFHS------    279
tr|A0A2Y9LBN9|A0A2Y9LBN9_ENHLU    YLSGAGAGASSG---DEEDSDEDKEGSGD--GDWPSRVEFY--ASGVSWSAFHS------    281
tr|A0A3Q7UUY9|A0A3Q7UUY9_URSAR    YLTGAVCGASSG---DDEDSDEDREGSGD--GDWPSRVEFY--SSGVSWSAFHS------    279
tr|A0A2F0BD53|A0A2F0BD53_ESCRO    YLAGAVCGASSG---DDDDSDEDREGSGD--GDWPSRVEFY--ASGVSWSSFHS------    298
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tr|G3UCB5|G3UCB5_LOXAF            YLAGAVLVASSG---DDDDSDEDKEGDGD--GDWPSRVEFY--ASGVSWSSFHS------         279
tr|A0A2Y9QH78|A0A2Y9QH78_TRIMA    YLAGAVFGASSG---DDDDSDEDKEGSGD--GDWPSRVEFY--ASGASWSSFHS------         279
tr|A0A2S0YE73|A0A2S0YE73_CASCN    HLGGPGGGTSSC---DDDDSDEDR----D--VSWPSRVEFY--TSGVSWSSFHS------         275
tr|A0A6I9K0J7|A0A6I9K0J7_CHRAS    HFAGA---ASSG---DDEDSDEDKEGSGD--GDWSSRVHFY--TSNVSWSSFHS------         276
tr|A0A452QT72|A0A452QT72_URSAM    YLAGA---DDEDSDEDREGSGD--GDWPSRVEFY--SSGVSWSAFHS------         279
tr|A0A4X1TW95|A0A4X1TW95_PIG      YLAGAVCGASSG---DDDDSDEDREG-GD--GDWPSRVEFY--AGGVSWSSFHS------         283
tr|F1RNZ0|F1RNZ0_PIG              YLAGAVCGASSG---DDDDSDEDREG-GD--GDWPSRVEFY--AGGVSWSSFHS------         283
tr|A0A484GVY7|A0A484GVY7_SOUCH    YLAGAVCGASSG---DDDDSDEDREGSGD--GDWPSRVEFY--ASGVSWSSFHS------         348
tr|A0A7J8CKE8|A0A7J8CKE8_ROUAE    -PAGAGSGASSG-E-DEDDSEDDKEGSGD--SDWPSRVKFY--AAGVSWSSFHS------         275
tr|A0A5G2RAS5|A0A5G2RAS5_PIG      YLAGAVCGASSG---DDDDSDEDREG-GD--GDWPSRVEFY--AGGVSWSSFHS------         294
tr|A0A1A6G1C6|A0A1A6G1C6_NEOLE    LGG-AVCGASSG---DDDDSDEDREGSGD--GDWPSQVEFY--ASGVSWSAFHS------         297
tr|A0A6J2L2L8|A0A6J2L2L8_9CHIR    SPARAGCGASSGD--D-EDSDDDREGSGD--GDWPSRVRFY--DSGVSWSSFHS------         277
tr|A0A3Q2LSN2|A0A3Q2LSN2_HORSE    CLAGAICGASSG---DDYDSDEDKEGSGD--GEWPSHVEFY--TSGVSWSSFHS------         330
tr|E2R1B7|E2R1B7_CANLF            YLGGAECGASSG---DDEDSDEDKEGGGD--GDWPSHVEFY--ASGVSWSAFHG------         465
tr|K9IX34|K9IX34_DESRO            SLAGAGCGASSGD----EDSDEDREGSAD--GDWPSRVRFY--DSGVSWSAFHS------         279
tr|A0A7J7SDK0|A0A7J7SDK0_MYOMY    SEAGAGCGVSSGDE-DDDDSEEDKEGGGE--GDWPSRIRFY--DSGVSWSSFHS------         284
tr|A0A6P3IET2|A0A6P3IET2_BISBI    HLAGAVCGASSG---DDDDSDEDKEGSGD--GDWPSHVEFY--ASGVSWSSFHS------         265
tr|G3HI22|G3HI22_CRIGR            ----------------NDVSDDDD------DDDSS---------D------------         122
tr|G5C4B3|G5C4B3_HETGA            ----------------NNVSDDED------DDSSD--------------------         127
tr|W5P1M9|W5P1M9_SHEEP            YLAGAVCGASSG---DDDDSDEDREGSGD--GDWPSHVEFY--ASGVSWSSFHS------         225
tr|S9WTG5|S9WTG5_CAMFR            YLAGAVCGASSGED---DDSDEDKEGSGD--GDWPSRVEFY--ASGVSWSSFHS------         303
tr|A0A6J0AU76|A0A6J0AU76_VICPA    YLAGAVCGASSG---EDDDSDEDKEGSGD--GDWPSRVEFY--ASGVSWSSFHS------         246
tr|L5KVX2|L5KVX2_PTEAL            -PAGAGSGASSG-E-DEDDSEEDKEGSGD--GDWPSRVKFY--GEGVSWSSFHS------         302
tr|A0A2J8KSN2|A0A2J8KSN2_PANTR    ----------------------------------------------------------         128
tr|A0A2J8SAE9|A0A2J8SAE9_PONAB    ----------------------------------------------------------         128
tr|K7ELB8|K7ELB8_HUMAN            ----------------------------------------------------------         128
tr|L8Y3Z0|L8Y3Z0_TUPCH            HLTGAVCGASSG---DDDDSDEDKEGYGD--GDWPSHVEFY--ASGVSWSAFHR------         640
tr|A0A2J8KSM7|A0A2J8KSM7_PANTR    ----------------------------------------------------------          82
tr|A0A2J8SAE1|A0A2J8SAE1_PONAB    ----------------------------------------------------------          82
tr|K7EIX0|K7EIX0_HUMAN            ----------------------------------------------------------          82
tr|A0A2J8KVM1|A0A2J8KVM1_PANTR    ----------------------------------------------------------         279
tr|A0A2J8XN15|A0A2J8XN15_PONAB    ----------------------------------------------------------         279
tr|F8VQX5|F8VQX5_HUMAN            ----------------------------------------------------------         279
tr|A0A4X2MDN9|A0A4X2MDN9_VOMUR    -LSSVLHSIPSGRKQKKIP-AALKEVSANTEDSTMSGYLYRSKGSKKPWKHFWFVIKNKV        1342
tr|A0A4X2M634|A0A4X2M634_VOMUR    -LSSVLHSIPSGRKQKKIP-AALKEVSANTEDSTMSGYLYRSKGSKKPWKHFWFVIKNKV        1375
tr|F6W6U6|F6W6U6_MONDO            -LSSVLHSIPSGRKQKKIP-AALKEVSANTEDSTMSGYLYRSKGSKKPWKHFWFVIKNKV        1369
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Humans

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sp|Q9H8W4|PKHF2_HUMAN            -DDDDD---------DSSD---------------------------------------         249
sp|Q96S99|PKHF1_HUMAN            -GDDDD---------SDEDKEG--------SRDGDWPSSVE----------------F         267
tr|B4DWN9|B4DWN9_HUMAN           -GDDDD---------SDEDKEG--------SRDGDWPSSVE----------------F         352
tr|K7ELB8|K7ELB8_HUMAN           ----------------------------------------------------------         128
tr|K7EIX0|K7EIX0_HUMAN           ----------------------------------------------------------          82
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tr|F8VQX5|F8VQX5_HUMAN            ------------------------------------------------------------      279
tr|A4FVC4|A4FVC4_HUMAN            -PSSALSSVLH----SIP--SG--------RKQKKIPAALKEVSANT---EDSS-MSGYL      549
sp|Q6ZV73|FGD6_HUMAN             -PSSALSSVLH----SIP--SG--------RKQKKIPAALKEVSANT---EDSS-MSGYL     1340
tr|A0A2X0SFJ2|A0A2X0SFJ2_HUMAN    -PSSALSSVLH----SIP--SG--------RKQKKIPAALKEVSANT---EDST-MSGYL     1308
tr|Q49A55|Q49A55_HUMAN            GILE----------------------------------IESAEVSGNSVVCS-FLQ--      403
tr|F8W1R0|F8W1R0_HUMAN            GILE----------------------------------IESAEVSGNSVVCS-FLQ--      558
sp|Q96M96|FGD4_HUMAN             GILE----------------------------------IESAEVSGNSVVCS-FLQ--      651
tr|A0A2X0U2J9|A0A2X0U2J9_HUMAN    GILE----------------------------------IESAEVSGNSVVCS-FLQ--      651
tr|B7Z493|B7Z493_HUMAN            GILE----------------------------------IESAEVSGNSVVCS-FLQ--      736
tr|B7Z8F9|B7Z8F9_HUMAN            GILE----------------------------------IESAEVSGNSVVCS-FLQ--      763
tr|E9PJX4|E9PJX4_HUMAN            GILE----------------------------------IESAEVSGNSVVCS-FLQ--      763
tr|F8VWL3|F8VWL3_HUMAN            GILE----------------------------------IESAEVSGNSVVCS-FLQ--      788
sp|Q7Z6J4|FGD2_HUMAN             GILE----------------------------------KGSSATPDQSLMCS-FLQ--      552
tr|A8K304|A8K304_HUMAN            GILE----------------------------------KGSSATPDQSLMCS-FLQ--      552
tr|A0A384NQ05|A0A384NQ05_HUMAN    GILE----------------------------------KGSSATPDQSLMCS-FLQ--      552
tr|A0A2X0SYZ7|A0A2X0SYZ7_HUMAN    GILE----------------------------------KGSSATPDQSLMCS-FLQ--      552
sp|P98174|FGD1_HUMAN             SILE----------------------------------KQASVAAENSVICS-FLH--      829
tr|A0A024R9Y5|A0A024R9Y5_HUMAN    SILE----------------------------------KQASVAAENSVICS-FLH--      829
tr|A0A2X0SFE1|A0A2X0SFE1_HUMAN    SILE----------------------------------KQASVAAENSVICS-FLH--      829
tr|G3V2D8|G3V2D8_HUMAN            -ESPPYSFVVR-----V---PK--------ADEVEWILDLKEEE------NELV-RSEFY     1927
tr|A0A7I2YQV0|A0A7I2YQV0_HUMAN    -ESPPYSFVVR-----V---PK--------ADEVEWILDLKEEE------NELV-RSEFY     1901
sp|Q68DK2|ZFY26_HUMAN            -ESPPYSFVVR-----V---PK--------ADEVEWILDLKEEE------NELV-RSEFY     1927
tr|A0A7I2YQU3|A0A7I2YQU3_HUMAN    -ESPPYSFVVR-----V---PK--------ADEVEWILDLKEEE------NELV-RSEFY     1933
tr|A0A7I2V403|A0A7I2V403_HUMAN    -ESPPYSFVVR-----V---PK--------ADEVEWILDLKEEE------NELV-RSEFY     1942
tr|B7ZM68|B7ZM68_HUMAN            -SGSAFSSVFQ----SINPSTF--------KKQKKVPSALT------------------     1114
tr|A3KMQ0|A3KMQ0_HUMAN            -SGSAFSSVFQ----SINPSTF--------KKQKKVPSALTEVAASG---EGSA-ISGYL     1129
sp|Q6ZNL6|FGD5_HUMAN             -SGSAFSSVFQ----SINPSTF--------KKQKKVPSALTEVAASG---EGSA-ISGYL     1370
tr|A0A2X0SFF2|A0A2X0SFF2_HUMAN    -SGSAFSSVFQ----SINPSTF--------KKQKKVPSALTEVAASG---EGSA-ISGYL     1370
sp|Q8WXA3|RUFY2_HUMAN            ----------------------------------------------------------      606
tr|H0YD93|H0YD93_HUMAN            ----------------------------------------------------------      620
tr|B3KSL1|B3KSL1_HUMAN            ----------------------------------------------------------      310
tr|A8K7B1|A8K7B1_HUMAN            ----------------------------------------------------------      600
sp|Q96T51|RUFY1_HUMAN            ----------------------------------------------------------      708
tr|Q59GI4|Q59GI4_HUMAN            ----------------------------------------------------------     1333
sp|O95405|ZFYV9_HUMAN            ----------------------------------------------------------     1425
sp|Q7Z3T8|ZFY16_HUMAN            ----------------------------------------------------------     1539
tr|A0A024RAL3|A0A024RAL3_HUMAN    ----------------------------------------------------------     1539
tr|B4DVN4|B4DVN4_HUMAN            GILE----------------------------------KGSSATPDQSLMCS-FLQ--      180
sp|Q15075|EEA1_HUMAN             ----------------------------------------------------------     1411
tr|Q49AA1|Q49AA1_HUMAN            ----------------------------------------------------------      192
tr|F8VY01|F8VY01_HUMAN            ----------------------------------------------------------     1206
sp|Q9HCC9|LST2_HUMAN             ----------------------------------------------------------      887
sp|Q9Y4F1|FARP1_HUMAN            ------------------------------------------------AVENQ-LSGNL      939
tr|A0A2X0TVY0|A0A2X0TVY0_HUMAN    ------------------------------------------------AVENQ-LSGNL      939
tr|B4DS99|B4DS99_HUMAN            ----------------------------------------------------------      525
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tr|G5E953|G5E953_HUMAN            -PIAATSN----------------------------------------------   1062
sp|Q13615|MTMR3_HUMAN            -PIAATSN----------------------------------------------   1198
tr|A8K0L6|A8K0L6_HUMAN            -PIAATSN----------------------------------------------   1198
tr|A7E2W2|A7E2W2_HUMAN            -PIAATSN----------------------------------------------   1198
sp|Q5JSP0|FGD3_HUMAN             ------------------------------------DPQPSLLCG-PLR--   612
tr|A0A024R252|A0A024R252_HUMAN   ------------------------------------DPQPSLLCG-PLR--   612
tr|A0A2X0U4Q9|A0A2X0U4Q9_HUMAN   ------------------------------------DPQPSLLCG-PLR--   612
tr|Q9H8N9|Q9H8N9_HUMAN            -G---------------LMVTCGTD---RIVKIWDMTP--------VVGC------S   359
sp|Q8IWB7|WDFY1_HUMAN            -G---------------LMVTCGTD---RIVKIWDMTP--------VVGC------S   402
tr|A0A024R488|A0A024R488_HUMAN   -G---------------LMVTCGTD---RIVKIWDMTP--------VVGC------S   402
tr|A0A7I2YQD1|A0A7I2YQD1_HUMAN   -----QSQLPPKRD-ETA----------LQEEEELQLALALSQSEAEEKERLRQKSTYT   264
tr|I3L1P5|I3L1P5_HUMAN            -----QSQLPPKRD-ETA----------LQEEEELQLALALSQSEAEEKERLRQKSTYT   287
tr|B4E1E2|B4E1E2_HUMAN            -----QSQLPPKRD-ETA----------LQEEEELQLALALSQSEAEEKERLRQKSTYT   287
tr|A0A7I2V3Z1|A0A7I2V3Z1_HUMAN   -----QSQLPPKRD-ETA----------LQEEEELQLALALSQSEAEEKERLRQKSTYT   220
tr|Q9NXY1|Q9NXY1_HUMAN            SCSP-----------------------------------PGGAAEPPDTCSCA-PAA--   685
tr|A0A0S2Z4Q4|A0A0S2Z4Q4_HUMAN   -----QSQ----------------------------------------------   247
tr|A0A7I2V6E0|A0A7I2V6E0_HUMAN   -----QSQLPPKRD-ETA----------LQEEEELQLALALSQSEAEEKERLRQKSTYT   220
tr|A8K9G1|A8K9G1_HUMAN            ------------------------------------DPQPSLLCG-PLR--   611
tr|A0A7I2V2K2|A0A7I2V2K2_HUMAN   -----QSQLPPKRD-ETA----------LQEEEELQLALALSQSEAEEKERLRQKSTYT   287
tr|A0A7I2V5A2|A0A7I2V5A2_HUMAN   -----QSQLPPKRD-ETA----------LQEEEELQLALALSQSEAEEKERLRQKSTYT   287
tr|A0A7I2V3I8|A0A7I2V3I8_HUMAN   -----QSQLPPKRD-ETA----------LQEEEELQLALALSQSEAEEKERLRQKSTYT   271
tr|A0A7I2V3F9|A0A7I2V3F9_HUMAN   -----QSQLPPKRD-ETA----------LQEEEELQLALALSQSEAEEKERLRQKSTYT   287
tr|A0A7I2V2D8|A0A7I2V2D8_HUMAN   -----QSQLPPKRD-ETA----------LQEEEELQLALALSQSEAEEKERLRQKSTYT   287
tr|A0A7I2V2W5|A0A7I2V2W5_HUMAN   -----QSQLPPKRD-ETA----------LQEEEELQLALALSQSEAEEKERLRQKSTYT   278
tr|A0A7I2V2R9|A0A7I2V2R9_HUMAN   -----QSQLPPKRD-ETA----------LQEEEELQLALALSQSEAEEKERLRQKSTYT   287
sp|O14964|HGS_HUMAN              -----QSQLPPKRD-ETA----------LQEEEELQLALALSQSEAEEKERLRQKSTYT   287
tr|A0A7I2V3J3|A0A7I2V3J3_HUMAN   -----QSQLPPKRD-ETA----------LQEEEELQLALALSQSEAEEKERLRQKSTYT   287
tr|A0A0S2Z4R4|A0A0S2Z4R4_HUMAN   -----QSQLPPKRD-ETA----------LQEEEELQLALALSQSEAEEKERLRQKSTYT   287
tr|A0A7I2V637|A0A7I2V637_HUMAN   -----QSQLPPKRD-ETA----------LQEEEELQLALALSQSEAEEKERLRQKSTYT   305
tr|A0A7I2V5A3|A0A7I2V5A3_HUMAN   -----QSQLPPKRD-ETA----------LQEEEELQLALALSQSEAEEKERLRQKSTYT   287
tr|B4DFP5|B4DFP5_HUMAN            ----------------------------------------------------   221
sp|O94887|FARP2_HUMAN            ------------------------------------------AVENQ-LSGYL   936
tr|A0A2X0SSL3|A0A2X0SSL3_HUMAN   ------------------------------------------AVENQ-LSGYL   936
tr|J3QR65|J3QR65_HUMAN            -PIATASS----------------------------------------------   1138
sp|Q9NYA4|MTMR4_HUMAN            -PIATASS----------------------------------------------   1195
tr|Q5H9P4|Q5H9P4_HUMAN            ----------------------------------------------------   924
sp|Q9P2R3|ANFY1_HUMAN            ----------------------------------------------------   1169
tr|A0A7I2V307|A0A7I2V307_HUMAN   -----QSQLPPKRD-ETA----------LQEEEELQLALALSQSEAEEKERLRQKSTYT   293
tr|A0A024R1I2|A0A024R1I2_HUMAN   -PIAATSN----------------------------------------------   1161
sp|Q9HBF4|ZFYV1_HUMAN            ----------------------------------------------------   777
tr|G3V5N8|G3V5N8_HUMAN            ----------------------------------------------------   789
tr|C9JME2|C9JME2_HUMAN            ------------------------------------------AVENQ-LSGNL   970
tr|C9JL08|C9JL08_HUMAN            ----------------------------------------------------   241
sp|Q9BQ24|ZFY21_HUMAN            ----------------------------------------------------   234
tr|E9PDH4|E9PDH4_HUMAN            -----IF-----------I-----------KRQAPLKVSLLQDLKDFFQK----------   1363
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sp|Q9Y2I7|FYV1_HUMAN                   -----IF-----------I----------KRQAPLKVSLLQDLKDFFQK----------           1419
tr|V9HWG4|V9HWG4_HUMAN                 -----IF-----------I----------KRQAPLKVSLLQDLKDFFQK----------           1419
tr|A0A7I2V5X2|A0A7I2V5X2_HUMAN         -----HSQRRRRRR-G------------------------------------------             74
tr|A7E1Z6|A7E1Z6_HUMAN                 ----------------------------------------------------------            281
tr|Q96LK4|Q96LK4_HUMAN                 -G---------------WLLTSRTD---KVIKLWDMTP--------VVS-------               297
sp|Q9BQS8|FYCO1_HUMAN                  GPQAT-----G----G-----QGANTDYRPPDDAVFDIIT-------DEELCQ-IQESG          1295
sp|Q96P53|WDFY2_HUMAN                  -G---------------WLLTSGTD---KVIKLWDMTP--------VVS-------               400
tr|A7E293|A7E293_HUMAN                 ----------------------------------------------------------           1563
sp|Q8IZQ1|WDFY3_HUMAN                  ----------------------------------------------------------           3526
tr|A0A024RDC2|A0A024RDC2_HUMAN         ----------------------------------------------------------           3526
tr|B4DXH4|B4DXH4_HUMAN                 -----------------------------------------DPQPSLLCG-PLR--              215
tr|A0A7I2V5N3|A0A7I2V5N3_HUMAN         ----------------------------------------------------------             64
tr|A0A7I2V5W6|A0A7I2V5W6_HUMAN         ----------------------------------------------------------             64
tr|Q96P52|Q96P52_HUMAN                 ----------------------------------------------------------            420
tr|B3KPJ0|B3KPJ0_HUMAN                 ----------------------------EFSDDWTLSGKDNSGLIEQVGKCS-LLPYF           564
tr|H0Y696|H0Y696_HUMAN                 ----------------------------EFSDDWTLSGKDNSGLIEQVGKCS-LLPYF           573
tr|A8K4R4|A8K4R4_HUMAN                 ----------------------------------------------------------           1104
tr|Q6IQ41|Q6IQ41_HUMAN                 ----------------------------EFSDDWTLSGKVGN---------------            1237
sp|Q96Q42|ALS2_HUMAN                   ----------------------------EFSDDWTLSGKGTLTMPNGD---Y-IEGYF          1249
tr|A0A2X0SFA0|A0A2X0SFA0_HUMAN         ----------------------------EFSDDWTLSGKGTLTMPNGD---Y-IEGYF          1249
sp|Q9H1K0|RBNS5_HUMAN                  EYIRMAASLNA----GETTYSLEHASDLRVEVQKVYELID---------ALSKK-ILTLG        340
tr|A8K5H3|A8K5H3_HUMAN                 EYIRMAASLNA----GETTYSLEHASDLRVEVQKVYELID---------ALSKK-ILTLG        340
tr|H3BRF9|H3BRF9_HUMAN                 --------QSQ----GLT--------------RQDQMIA--------ERLARL-RQE--         164
sp|Q8TCU6|PREX1_HUMAN                  GCLEHLFNQVD----SINALLKGPVMSRAFEETKHFPMN--HSLQEFKQKEECT-IRGRS       1272
tr|A0A2X0SFH1|A0A2X0SFH1_HUMAN         GCLEHLFNQVD----SINALLKGPVMSRAFEETKHFPMN--HSLQEFKQKEECT-IRGRS       1272
tr|M0QXT1|M0QXT1_HUMAN                 ----------------------------------------------------------           248
tr|B3KPZ0|B3KPZ0_HUMAN                 ----------------------------------------------------------          1093
tr|H3BRM1|H3BRM1_HUMAN                 --------QSQ----GLT--------------RQDQMIA--------ERLARL-RQE--         158
tr|E9PJM7|E9PJM7_HUMAN                 ----------------------------------------------------------           226
sp|Q96K21|ANCHR_HUMAN                  --------QSQ----GLT--------------RQDQMIA--------ERLARL-RQE--         187
tr|B4E245|B4E245_HUMAN                 ----------------------------------------------------------           516
tr|E7EMB1|E7EMB1_HUMAN                 ----------------------------------------------------------           527
tr|B3KUB9|B3KUB9_HUMAN                 ----------------------------------------------------------           527
sp|Q9UH65|SWP70_HUMAN                  ----------------------------------------------------------           585
sp|Q70Z35|PREX2_HUMAN                  SCLEHLFSQVD----SITNLLKGQAVVRAFDQTKYLTPG--RGLQEFQQEMEPK-LSCPK       1212
tr|A0A2X0SZ31|A0A2X0SZ31_HUMAN         SCLEHLFSQVD----SITNLLKGQAVVRAFDQTKYLTPG--RGLQEFQQEMEPK-LSCPK       1212
tr|H3BN64|H3BN64_HUMAN                 --------QSQ----GLT--------------RQDQMIA--------ERLARL-RQE--         115
tr|H7C3C4|H7C3C4_HUMAN                 -EQPKFLGIREQRVTGLMIFILMGLSVFMTSVLKFIPMPVLYGVFLYMGV--SS-LKGIQ        604
tr|C9JRP1|C9JRP1_HUMAN                 -EQPKFLGIREQRVTGLMIFILMGLSVFMTSVLKFIPMPVLYGVFLYMGV--SS-LKGIQ        949
tr|A0A0A0MST8|A0A0A0MST8_HUMAN         -EQPKFLGIREQRVTGLMIFILMGLSVFMTSVLKFIPMPVLYGVFLYMGV--SS-LKGIQ       1038
tr|B5M450|B5M450_HUMAN                 -EQPKFLGIREQRVTGLMIFILMGLSVFMTSVLKFIPMPVLYGVFLYMGV--SS-LKGIQ       1049
tr|E9PFN4|E9PFN4_HUMAN                 -EQPKFLGIREQRVTGLMIFILMGLSVFMTSVLKFIPMPVLYGVFLYMGV--SS-LKGIQ       1049
sp|Q9Y6M7|S4A7_HUMAN                   -EQPKFLGIREQRVTGLMIFILMGLSVFMTSVLKFIPMPVLYGVFLYMGV--SS-LKGIQ       1053
tr|Q5JVY0|Q5JVY0_HUMAN                 ----------------------------------------------------------           172
tr|E7EW28|E7EW28_HUMAN                 -EQPKFLGIREQRVTGLMIFILMGSSVFMTSILKFIPMPVLYGVFLYMGA--SS-LKGIQ        954
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tr|C9J240|C9J240_HUMAN              -EQPKFLGIREQRVTGLMIFILMGSSVFMTSILKFIPMPVLYGVFLYMGA--SS-LKGIQ    924
sp|Q6U841|S4A10_HUMAN               -EQPKFLGIREQRVTGLMIFILMGSSVFMTSILKFIPMPVLYGVFLYMGA--SS-LKGIQ    954
sp|Q13049|TRI32_HUMAN               -----------------------------------------------------------    653
tr|A0A024R843|A0A024R843_HUMAN      -----------------------------------------------------------    653
sp|P52735|VAV2_HUMAN                -----------------------------------------------------------    878
tr|B4DFS9|B4DFS9_HUMAN              -----------------------------------------------------------    328
tr|H0Y724|H0Y724_HUMAN              -----------------------------------------------------------    0
tr|B4E2V8|B4E2V8_HUMAN              ----RFVSMNR----GINN-------------GSDLPEDQLRNLFDSIK-----------    182
sp|Q9UIA0|CYH4_HUMAN                ----RFVSMNR----GINN-------------GSDLPEDQLRNLFDSIK-----------    239
tr|B2RCD2|B2RCD2_HUMAN              ----RFVSMNR----GINN-------------GSDLPEDQLRNLFDSIK-----------    239
tr|A7E2A5|A7E2A5_HUMAN              ------------------------ATLDSDHKLPSRVIEELNVVLQRSRTL-PKELQ    1628
sp|Q8WZ64|ARAP2_HUMAN               ------------------------ATLDSDHKLPSRVIEELNVVLQRSRTL-PKELQ    1698
tr|A0A2X0SFS3|A0A2X0SFS3_HUMAN      ------------------------ATLDSDHKLPSRVIEELNVVLQRSRTL-PKELQ    1698
tr|B4DZ04|B4DZ04_HUMAN              -----------------------------------------------------------    415
tr|B4E1Y1|B4E1Y1_HUMAN              -----------------------------------------------------------    415
tr|Q5SQI7|Q5SQI7_HUMAN              -----------------------------------------------------------    542
tr|A0A2X0SFV4|A0A2X0SFV4_HUMAN      -----------------------------------------------------------    544
sp|Q7Z628|ARHG8_HUMAN               -----------------------------------------------------------    596
tr|Q5SQI5|Q5SQI5_HUMAN              -----------------------------------------------------------    596
tr|B4DS29|B4DS29_HUMAN              -----------------------------------------------------------    677
sp|Q2Y0W8|S4A8_HUMAN                -EQPKFLGIREQRVTGLMIFVLMGCSVFMTAILKFIPMPVLYGVFLYMGV--SS-LQGIQ    923
tr|Q9NUL6|Q9NUL6_HUMAN              ----RFVSMNR----GINN-------------GSDLPEDQLRNLFDSIK-----------    46
tr|A0A0D9SFG6|A0A0D9SFG6_HUMAN      ----RFVAMNR----GINE-------------GGDLPEELLRNLYDSIR-----------    239
sp|Q6ZNE9|RUFY4_HUMAN               -----------------------------------------------------------    571
tr|B2RBP7|B2RBP7_HUMAN              -----------------------------------------------------------    631
sp|Q8IVQ6|ZDH21_HUMAN               -RLAAFMG--------ITMLVG---------ITGLFYTQLIGIITD-----TTS-IE---    213
tr|Q15795|Q15795_HUMAN              ----RFVAMNR----GINE-------------GGDLPEELLRNLYDSIR-----------    105
tr|C9JKV5|C9JKV5_HUMAN              -----------------------------------------------------------    131
sp|Q9P2F6|RHG20_HUMAN               ---PHASGVPE------ANSLQ--------EEQKDLPLRAAEGLSPVQSAQRCS-SSPFQ    1116
tr|A0A2X0U2C5|A0A2X0U2C5_HUMAN      ---PHASGVPE------ANSLQ--------EEQKDLPLRAAEGLSPVQSAQRCS-SSPFQ    1116
tr|E9PNM3|E9PNM3_HUMAN              RPILQA-GLPA----N-KTVALGSNVEFM--------------------CK-VYS--    281
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