

>FoccOBP1

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GLFINC VKKVDPTFNVPAWAASVAKSTMLHTPDMLLPQDKNTPAFLYPQFLIKASICYKTMKTAPK  
NDKF

>FintOBP1

MDRPGALLSLLAVLLALSATALCHPRPRPAPLVTPPEQYEKSLKMLRNVCVPTGIPEDMLNRMKGGEF  
VQDEKAYCYTACFLQTMMVLKNNKVDSKMFQLQVKMMMLPDAAARVIAAFTSCEGTPAGAEP CETT  
TGLFINC VKKVDPTFNVPAWTHHNAKPHRRRLREREPRLFTWHH

>FoccOBP2

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RYDSL TGLSDRYSEGSGSKEPNMNFPEVAVAKCLPSSNPDPASNWFGFGSSDCNRAYLDFS YCVW  
EELHADCPSQLWDSDNKWCEETKEYLQARSQ LTKS\*

>FintOBP2

MDAPTLIGVVIATVVASASAATYNLDNPYFNRS LFDQLDDYYMPNSENFAESDPELRSKMSFSNEM  
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DRYDSL TGRLSDSYSEGSGKKEPNMNFPEVAVAKCLPASNPDPANWFGFGSSDCNRAYLDFS YCV  
WEELHANCPARLWDFNNKWCEETKEYLLVRSQ LTKKWSGLVKNVSWIVRNTPM MISCQ\*

>FoccOBP3

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TCGYDKSEIFRDVMKKFMGAMDKS\*

>FintOBP3

MQSSTVLLVAALVAMASLAQADKKKELMPRYIKYALECAKELNAEVGVCKEMMKEGNDNSAEKYQP  
CKCVIACVAKKAKVMTDGGDANVDAFTA AVDEF EIKESWSEWQRVKPLCEPEVKGKKDCVLGYDFF  
TCGYEKSEIFRDVIKKFMGAMDKS\*

>FoccOBP4

MKTLTLLAALLALCGLASAGVELSEDQKQLMKQLSSAYMAETGVDEATIDACKTGQFADDPKLKCY  
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APDYYMVV\*

>FintOBP4

MKTVLPLVVVLLALCGMASAGVELSEDQKQLMKQLSTACMAETGVDEATIDACKSGQFADDPKLK  
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KAPEYYMVV\*

>FoccOBP5

MKVFVLLAVALVAYASADEAARERAKAIKKECKEQAGATDDDLKELKEKDELLSPVNKKLMACVFSKN  
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EYRKAMATVPNQDISQSSW

>FintOBP5

MKVLLIALALAACAACAVADDAARERAKAIKKECKEQVGATDDDVKELKEKDQLLSPVNKKLMACVF  
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>FoccOBP6

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AVCAWKN SKMMRDTVGQYMGQMDGE\*

>FintOBP6

MKAVNVVVLAAAAALVQPAAAEDNRDKLPEYMAAAMDVCVDYEMDFTVCKEMMKDGVNLAEKF  
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LAVCAWKN SKMMRDTIGQYMGQMDGE\*

>FoccOBP7

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>ApisOBP1

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TLVTCIVLEANKAGLVDDPARQI

>ApisOBP2

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>ApisOBP3

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DKST

>ApisOBP4

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>ApisOBP5

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AMKSVFKEQWQKQVGQKALDKCLEETYIPWPAEDKENVCNPVYVQFQHCLWLQYESNCPANKIKI  
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>ApisOBP6

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WQNSLNKCFDDVKQEDKKQILIMNTPAGRLMKCFLRDMYMSCPKNVVWVESSECLNMKDLVQKCP  
EMPPP VFKSPPKLI

>ApisOBP7

MVARKRMYNMLPTTVLFIAAATVLKDCDAYLSEAAIKKTQQMLKTVCSKKHSVEEDVFTNIKKGIFPE  
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>ApisOBP8

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CLMRKVVNVINKGKFSVEEATKVAQKYYGTNEAMMKKAKDLIDVCAKKAQSTTEECALAGIVTTCIVEE  
AQKAGLSGGPGSRSRRTVSPKFRRDAM

>ApisOBP9

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CAFKESPALKERVSTLMEMLVKMKPKSK

>ApisOBP10

MEHLRSTNVVFAIVMALLVVQSSTRPQPDMEIEIKRTLYNACAGKFPITEEIKNNAKNSIISDDPTFKCF  
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PL

>ApisOBP11

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>ApisOBP12

MEHLRSKNVVFAIVMALLIRPKTDGNDIAEEMKNTLYNICSTKYRITEELKNNVKKSIISDDPTFKCFLKC  
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>ApisOBP13

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QQYSGNTGSRSKNHRQGSYPSADYDSGQSNSNYNRQSLPTRRYRRDDSNEKSKRQKAAVTGSNN  
RLLGNNRFRNMTKTGGNQPGKGYLDKMDACTIHCFVFNQLEMLNSNSRPDKYSIVNIMTNQIKDVE  
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QDKRKG

>ApisOBP14

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KLT

>AmelOBP1

MASNTKQAFIYSLALLCLHAIFVNAAPDWVPPEVFDLVAEDKARCMSEHGTTQAQIDDVDKGNLVN  
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>AmelOBP2

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CYIEKLFS

>AmelOBP3

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ANSNTTSEEESDNT

>AmelOBP4

MKITIVSLLCVIYCALVHADTVAILCSQKAGFDLSCLKSMYESNSEEQMKKLGCFEACVFQKLHFMDG  
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>AmelOBP5

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PEKFFFP

>AmelOBP6

MKGLGVSLLVALLVLLAIEDTMSKKMTIEEAKKTIKNLRKVCSKKNDTPKELLDGQFRGEFPQDERLM  
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DKELYLAP

>AmelOBP7

MKKFLVIFVYILSVAVIIRANGINEILKIMAVSMKDIRYCIHMGLTFKDFIKMQELLQEEDISEGNIKKYLT  
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MYEDTFEDTLKHKSYV

>AmelOBP8

MTIEELKKTIKNLRKVCSKKNDTPKELLDGQFRGEFPQDERLMCYMKCIMIATKAMKNDVILWDFVKN  
NARMILLEEYIPRVESVVETCKKEVTSTEGCEVAWQFGKCIYENDKELYLAP

>AmelOBP9

MFKNYHFFFILVITLIFLYFGEADIKDCRKESKVSWAALKKMKAGDMEQDDQNLKCYLKCFMTKHGIL  
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>AmelOBP10

MKYSILLSLLITCLICSPSVHCGTRPSFVSDEMIATAASVVNACQTQTGVATVDIEAVRNGQWPETRQL  
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SPRTYYLF

>AmelOBP11

MKAAEIWLVSlyWYLILQIALVYGEISDIDFREMITSKYRKKCIGETKTTIEDVEATEYGEFPEDEKLKCYF  
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AP

>AmelOBP12

MLYNNLTIVIIIMCGVQNLRRSVNIFQDIADCVDNRNMTFHELKKLRDSSEARIKLINEEENFRNYGC  
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KLCMLKAMRNYP

>AmelOBP13

MKTIIFIFAFCLVGILAVSEESINKLRKIESVCAEENGIDLKKADDVKKGIFDKNDEKLACYVDCMLKKVGF  
VNADTTFNEEKFRERTTKLDSEQVNRLVNNCKDITESNSCKKSKLLQCFIDNNLMKIFE

>AmelOBP14

MKTIVLIFGFCVCGALTIEELKTRLHTEQSVCKTETGIDQQKANDVIEGNIDVEDKKVQLYCECILKNF  
NILDKNNVFKPQGIKAVMELLIDENSVKQLVSDCSTISEENPHLKASKLVQCVSKYKTMKSVDL

>AmelOBP15

MKTILIISAICICVGALS IKDFQNAIRMGQSICMAKTGINKQIINDVNDGKINIEDENVQLYIECAMKKFS  
FVDKDGNFNEHVSREIAKIFLNENEINQLITECSAISDTNVHLKITKIFQCITKFKTINDILNS

>AmelOBP16

MKTFVIIAICVCVGAMTHEELKTGIQTLQPICVGETGTSQKIIDEVYNGNVNVEDENVQSYVECMMK  
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>AmelOBP17

MKTIVIISAICVCVSAMTLDLKSGLHTVQSVCMKEIGTAQQIIDDINEGKINMDDENVLLFIECTMKKF  
NVVDENANFNKISSDIVRAVLNDNEADQLLAECSPISDPNALIKISKILECFFKYKTINQILNS

>AmelOBP18

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>AmelOBP19

MKTIVVIFAFCICVNAMTIEELKIQLRDVQEICKAESGIDQQTVDINEVNFDVEDEKPQRYNECILKQF  
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>AmelOBP20

MKTIVVIFAFCICVNAMTIEELKIQLHVDVQEICKTESGIDQQTVDINEVNFDVEDEKPQRYNECILKQF  
NIVDESGNFKENIVQELTSIYLDENVIKLVAECSVISDANIYIRFNKLVKCFGKYKTMKEVLNL

>AmelOBP21

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>DmelOBP18a

RVNAEGCLKHHNLTSAQVQAVAPSTPVADVPVAVKCYSRCLIQDYFGDDGKIDLQKVGKRGSQED  
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>DmelOBP19a

GVTEEQMWSAGKLMRDVCLPKYPKVSVEVADNIRNGDIPNSKDTNICYINCILEMMQAIKKGKFQLES  
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>DmelOBP19b

DEEEGSMTVDEVVELIEPFGDACTPKPSRENIVEMVLNKEDAKHETKCFRHCMLQFELMPEDQLQY  
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>DmelOBP19c

QTQAFDLAKLLPKTGTEPIWAVIDRNLPQVQELVTAARMECIQKLQLPRDQRPLGKVTNPSEKEKCLV  
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RQLERNNVKLVW

>DmelOBP19d

KPHEEINRDHAAELANECKAETGATDEDVEQLMSHDLPERHEAKCLRACVMKKLQIMDESGKLNKE  
HAIELVKVMSKHDAEKEDAPAEVVAKCEAIETPEDHCDAAAFAYEECIYEQMKEHGLEEEH

>DmelOBP22a

TKEPEEVKIVSECAKENNVHRKKALDLLMSYRLKKKTHNVMCFINCIFERTNILQKVKEKVKENHNCD  
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>DmelOBP28a

FDEKEALAKLMESAESCMPEVGATDADLQEMVKKQPASTYAGKCLRACVMKNIGILDANGKLDTEA  
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>DmelOBP47a

RFAKININLGLTVADESPKTITEEMIRLCGDQTDISLRELNLQREDFSDPSESVCFTHCLYEQMGLM  
HDGVFVERDLFGLLSDVSNTDYWPERQCHAIRGNNKCETAYRIHQCCQQLKQQQNLLATKEVEV  
TTTPAGSDETKP

>DmelOBP51a

LFESANECAKKLGITPDYFENFPHSSRVKCFYHCQMEKLEIIANGVVTPFDLKVNLISPESYDKYGVKV  
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>DmelOBP56a

SSLNLSDEQKDLAKQHREQCAEEVKLTEEEKAKVNAKDFNNPTENIKCFANCFEKGTLKDGELQES  
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>DmelOBP56b

QSAAELAAYKQIQACIKELNIAASDANLLTTDKEVANPSESVKCYHSCVYKKLGLLGDDGKPNTDKI  
VKLAQIRFSSLPVDKLSLLTSCGTTKSAATCDFVYNYEKC VVKGISA

>DmelOBP56c

KAWVMFFIFYISFTRSLSVSLNMSMTRTLVPDPNGTENKLSQEMLRACMRRTAISMSQLKLFHMSL  
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LLEAFKNQVQTIIQHEKAEIKECSDLQGKTRCEAAAYKLHLCYNHLKTLAEQRIREILERTEAENEGFGP  
EGSDFIDGIQHSGEAMTTAKSE

>DmelOBP56d

ELQLSDEQKAVAHANGALCAQQEGITKDQAIALRNGNFDDSDPKVKCFANCFLEKIGFLINGEVQPD  
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>DmelOBP56e

SAVGLTDSQKAEAKQRAKACVKQEGITKEQAIALRSGNFADSDPKVKCFANCFLEQTGLVANGQIKP  
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>DmelOBP56f

MKSSEKIKACLKRQLGYTITENTKFDKEDSLQSKCFYHCLLEVKGVIANDAISSSEQPRKVLEKKYGITDT  
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>DmelOBP56g

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>DmelOBP56h

NPDFRQIMQQCMETNQVTEADLKEFMASGMQSSAKENLKCYTKCLMEKQGHLTNGQFNAQAML  
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>DmelOBP56i

GPIKDQCMAAAGITAQDVANRHETDDPGHSVKCFRCFLENIGIADNQIIPGAFDRV LGHIVTAEAV  
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>DmelOBP57a

KESQPFDFEGTYDDFIDCLRINNITIEYEKFDDTDNLDNV LKENVELKHKCNICKQLEREPTKWL NAR  
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DLFDYDTIDL

>DmelOBP57b

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>DmelOBP57c

QSLSLLEETNYVSDCLASNISQAEFQELIDRNSSEEDDLENTDRRYKCFIHCLAEGNLLDTNGYLDV  
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>DmelOBP57d

MPEKMSRLVPHLACIIFILEIQFRIADSNDPCPHNQGIDEDIAESILGDWPANVDLT SVKRSHKCYVTC  
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>DmelOBP57e

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>DmelOBP59a

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>DmelOBP69a  
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>DmelOBP76a  
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>DmelOBP83b  
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>DmelOBP83g  
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>DmelOBP84a  
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>DmelOBP99a  
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>DmelOBP99b  
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KV  
>LmigOBP1  
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>LmigOBP2  
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>LmigOBP3  
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>LmigOBP11

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>LmigOBP17

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>SexiGOBP2

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>SexiPBP1

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>SexiPBP4

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>SexiOBP2

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>SexiOBP3

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>SexiOBP4

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>SexiOBP5

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>SexiOBP7

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>SexiOBP8

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>SexiOBP9

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>SexiOBP10

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>SexiOBP16

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>SexiOBP17

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>SexiOBP19

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>SexiOBP21

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>SexiOBP24

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>SexiOBP27

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>SexiOBP29

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>SexiOBP30

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>SexiOBP32

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>SexiOBP33

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>SexiOBP36

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>SexiOBP37

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>SexiOBP38

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>SexiOBP39

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>TcasOBP1

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>TcasOBP7

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>TcasOBP12

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>TcasOBP13

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>TcasOBP18

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>TcasOBP19

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>TcasOBP20

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>TcasOBP21

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>TcasOBP22

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>TcasOBP23

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>TcasOBP24

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>TcasOBP25

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>TcasOBP26

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LDYKS

>ApisCSP1

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>ApisCSP2

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>ApisCSP3

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>ApisCSP4

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>ApisCSP5

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>ApisCSP7

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>ApisCSP8

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>ApisCSP9

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>ApisCSP10

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>AmelCSP1

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>AmelCSP3

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>AmelCSP4

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>AmelCSP5

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>AmelCSP6

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>DmelCSPB38c

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>DmelCSPA87a

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>DmelCSPB93a

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>DmelCSPA98a

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>DmelCSPA29a

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>DmelCSPB38b

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>DmelCSPB38a

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>DmelCSPB42b

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>DmelCSPB53b

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>DmelCSPA84a

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>DmelCSPB74a

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>LmigCSP3

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>LmigCSP4

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>LmigCSP5

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>SexiCSP4

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>SexiCSP5

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>SexiCSP8

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>SexiCSP30

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>FintCSP1

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>FoccCSP2

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>FintCSP2

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>FoccCSP3

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>FintCSP3

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>FoccCSP4

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>FintCSP4

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>FintCSP5

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>FoccCSP6

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>FintCSP6

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>FoccCSP7

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>FoccCSP8

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>TcasCSP1

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>TcasCSP2

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>TcasCSP3

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>TcasCSP4

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>TcasCSP5

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D  
SAKK

>TcasCSP6

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NRFGENEEADAASNVISSTPLPPTTSTTTTTLTTKFTTKPSTKPTNKPVVVTKPPQAPPFATVGANLQ  
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>TcasCSP7

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>TcasCSP8

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>TcasCSP9

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>TcasCSP10

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>TcasCSP11

MKTLVPLFFVIAIASSLAENSKYTTKYDNVDLDEIISKDRLLKNYVNCLEKGKCTPDGAELKRHLPA  
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>TcasCSP12

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TSCSKCSQRQKDGSRTHIRYLIKNRDDWNELEAKYDPTGIYKNKYADELKAEGIVL

>TcasCSP13

MFLAIVLVCACTNVLSEEYTNQYNDELDAALKSERLMKSYFECLLGTGKCTPSGEELKKDIPDALKNE  
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>TcasCSP14

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>TcasCSP15

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HDFLE  
REGFIR

>TcasCSP16

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>TcasCSP17

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>TcasCSP18

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>TcasCSP19

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>TcasCSP20

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