





**Supplementary File 5. Ligand binding sites extracted from SARS protein targets and mapped on the sequence of wNsp5 protein aligned with the closest homologs found in UniProt. Shown is the second group of ligands.**


**Ligand BS:**


 ETHYL (5S,8S,11R)-8-BENZYL-5-(3-TERT-BUTOXY-3-OXOPROPYL)-3,6,9-TRIOXO-11-{[(3S)-2-  
OXOPYRROLIDIN-3-YL]METHYL}-1-PHENYL-2-OXA-4,7,10-TRIAZATETRADECAN-14-OATE (3TIU-G82, SARS)


 ETHYL (5S,8S,11R)-8-BENZYL-5-(2-TERT-BUTOXY-2-OXOETHYL)-3,6,9-TRIOXO-11-{[(3S)-2-  
OXOPYRROLIDIN-3-YL]METHYL}-1-PHENYL-2-OXA-4,7,10-TRIAZATETRADECAN-14-OATE (3TNS-G83, SARS)


 N-[(benzyloxy)carbonyl]-O-tert-butyl-L-seryl-N-[(2R)-5-ethoxy-5-oxo-1-[(3S)-2-oxopyrrolidin-  
3-yl]pentan-2-yl]-L-phenylalaninamide (3TNT-G85, SARS)


 N-[(5-METHYLISOXAZOL-3-YL)CARBONYL]-L-ALANYL-L-VALYL-N~-(1S)-4-ETHOXY-4-OXO-1-{[(3S)-2-  
OXOPYRROLIDIN-3-YL]METHYL}BUT-2-ENYL)-L-LEUCINAMIDE (1WOF-I12, SARS)


 N-[(BENZYOXY)CARBONYL]-O-(TERT-BUTYL)-L-THREONYL-3-CYCLOHEXYL-N-[(1S)-2-HYDROXY-1-[(3S)-2-  
OXOPYRROLIDIN-3-YL]METHYL}ETHYL]-L-ALANINAMIDE (2GX4-NOL, SARS)


 N-[(2S)-1-hydroxy-3-phenylpropan-2-yl]-Nalpha-[(2E)-3-phenylprop-2-enoyl]-L-  
phenylalaninamide (3SN8-S89, SARS)


 (2S)-3-(1H-imidazol-5-yl)-2-({[(3S,4aR,8aS)-2-(N-phenyl-beta-alanyl)decahydroisoquinolin-3-  
yl]methyl}amino)propanal (5C5O-SDJ, SARS)


 (2S)-3-(1H-imidazol-5-yl)-2-({[(3R,4aS,8aR)-2-(N-phenyl-beta-alanyl)decahydroisoquinolin-3-  
yl]methyl}amino)propanal (5C5N-SLH, SARS)


 4-(DIMETHYLAMINO)BENZOIC ACID (2V6N-XP1, SARS)

 N-[(benzyloxy)carbonyl]-3-[(2,2-dimethylpropanoyl)amino]-L-alanyl-N-[(1R)-4-oxo-1-[(3S)-2-  
oxopyrrolidin-3-yl]methyl}pentyl]-L-leucinamide (2ZU4-ZU3, SARS)

 N-[(benzyloxy)carbonyl]-O-tert-butyl-L-threonyl-N-[(1R)-4-cyclopropyl-4-oxo-1-[(3S)-2-  
oxopyrrolidin-3-yl]methyl}butyl]-L-leucinamide (2ZU5-ZU5, SARS)

 (5S,8S,14R)-ETHYL 11-(3-AMINO-3-OXOPROPYL)-8-BENZYL-14-HYDROXY-5-ISOBUTYL-3,6,9,12-TETRAOXO-  
1-PHENYL-2-OXA-4,7,10,11-TETRAAZAPENTADECAN-15-OATE (2GTB-AZP, SARS)

QHN73794			
SP P0C6X7 R1AB_CVHSA	EAACCHLAKALNDFSNSGSDVLYQPPQTSITSAVLQSGFRKMAFP	SGKVEGCMVQVTCGT	3287
TR Q6UZF5 Q6UZF5_CVHSA	EAACCHLAKALNDFSNSGADVLYQPPQTSITSAVLQSGFRKMAFP	SGKVEGCMVQVTCGT	3264
TR Q6UZF1 Q6UZF1_CVHSA	EAACCHLAKALNDFSNSGADVLYQPPQTSITSAVLQSGFRKMAFP	SGKVEGCMVQVTCGT	3264
TR Q6JH48 Q6JH48_CVHSA	EAACCHLAKALNDFSNSGADVLYQPPQTSITSAVLQSGFRKMAFP	SGKVEGCMVQVTCGT	3264
TR Q692E6 Q692E6_CVHSA	EAACCHLAKALNDFSNSGADVLYQPPQTSITSAVLQSGFRKMAFP	SGKVEGCMVQVTCGT	3264
TR A0A0K1YZY7 A0A0K1YZY7_CVHSA	EAACCHLAKALNDFSNSGSDVLYQPPQTSITSAVLQSGFRKMAFP	SGKVEGCMVQVTCGT	3264
SP P0C6W2 R1AB_BCHK3	EAACCHLAKALNDFSNSGADVLYQPPQTSITSAVLQSGFRKMAFP	SGKVEGCMVQVTCGT	3258
SP P0C6W6 R1AB_BCRP3	EAACCHLAKALNDFSNSGADVLYQPPQTSITSAVLQSGFRKMAFP	SGKVEGCMVQVTCGT	3262
SP P0C6V9 R1AB_BC279	EAACCHLAKALNDFSNSGADVLYQPPQTSITSAVLQSGFRKMAFP	SGKVEGCMVQVTCGT	3270
TR A0A0U1WHI4 A0A0U1WHI4_CVHSA	EAACCHLAKALNDFSNSGADVLYQPPQTSITSAVLQSGFRKMAFP	SGKVEGCMVQVTCGT	3259
TR A0A0U1WHG0 A0A0U1WHG0_CVHSA	EAACCHLAKALNDFSNSGADVLYQPPQTSITSAVLQSGFKKVAFP	SGKVEGCMVQVTCGT	3259
TR A0A166ZL34 A0A166ZL34_9NIDO	EAACCHLAKALNDFSNSGADVLYQPPQTSITSAVLQSGFKKMAFP	SGKVEGCMVQVTCGT	3066
TR R9QTB2 R9QTB2_CVHSA	EAACCHLAKALNDFSNSGADVLYQPPQTSITSAVLQSGFRKMAFP	SGKVEGCMVQVTCGT	3256
TR R9QTH2 R9QTH2_CVHSA	EAACCHLAKALNDFSNSGSDVLYQPPQTSITSAVLQSGFRKMAFP	SGKVEGCMVQVTCGT	3265
SP P0C6U8 R1A_CVHSA	EAACCHLAKALNDFSNSGADVLYQPPQTSITSAVLQSGFRKMAFP	SGKVEGCMVQVTCGT	3264
TR Q6JH47 Q6JH47_CVHSA	EAACCHLAKALNDFSNSGADVLYQPPQTSITSAVLQSGFRKMAFP	SGKVEGCMVQVTCGT	3264
TR Q692E5 Q692E5_CVHSA	EAACCHLAKALNDFSNSGADVLYQPPQTSITSAVLQSGFRKMAFP	SGKVEGCMVQVTCGT	3264
SP P0C6F8 R1A_BCHK3	EAACCHLAKALNDFSNSGADVLYQPPQTSITSAVLQSGFRKMAFP	SGKVEGCMVQVTCGT	3258
TR A0A0K1Z0N1 A0A0K1Z0N1_CVHSA	EAACCHLAKALNDFSNSGSDVLYQPPQTSITSAVLQSGFRKMAFP	SGKVEGCMVQVTCGT	3264
SP P0C6F5 R1A_BC279	EAACCHLAKALNDFSNSGADVLYQPPQTSITSAVLQSGFRKMAFP	SGKVEGCMVQVTCGT	3270
SP P0C6T7 R1A_BCRP3	EAACCHLAKALNDFSNSGADVLYQPPQTSITSAVLQSGFRKMAFP	SGKVEGCMVQVTCGT	3262
	*****:*****:*****		



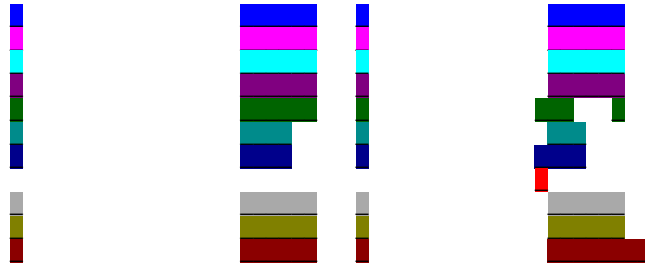
QHN73794	TTLNGLWLDDVVYCPRHVICTSEDMLNPNYEDLLIRKSNHNFVQAGNVQLRVIGHSMQN	3347
SP P0C6X7 R1AB_CVHSA	TTLNGLWLDDTVYCPRHVICTAEDMLNPNYEDLLIRKSNHSFLVQAGNVQLRVIGHSMQN	3324
TR Q6UZF5 Q6UZF5_CVHSA	TTLNGLWLDDTVYCPRHVICTAEDMLNPNYEDLLIRKSNHSFLVQAGNVQLRVIGHSMQN	3324
TR Q6UZF1 Q6UZF1_CVHSA	TTLNGLWLDDTVYCPRHVICTAEDMLNPNYEDLLIRKSNHSFLVQAGNVQLRVIGHSMQN	3324
TR Q6JH48 Q6JH48_CVHSA	TTLNGLWLDDTVYCPRHVICTAEDMLNPNYEDLLIRKANHSFLVQAGNVQLRVIGHSMQN	3324
TR Q692E6 Q692E6_CVHSA	TTLNGLWLDDTVYCPRHVICTAEDMLNPNYEDLLIRKSNHSFLVQAGNVQLRVIGHSMQN	3324
TR A0A0K1YZY7 A0A0K1YZY7_CVHSA	TTLNGLWLDDTVYCPRHVICTAEDMLNPNYEDLLIRKSNHSFLVQAGNVQLRVIGHSMQN	3324
SP P0C6W2 R1AB_BCHK3	TTLNGLWLDDTVYCPRHVVCTAEDMLNPNYDDLIRKSNHSFLVQAGNVQLRVIGHSMQN	3318
SP P0C6W6 R1AB_BCRP3	TTLNGLWLDDTVYCPRHVICTAEDMLNPNYEDLLIRKSNHSFLVQAGNVQLRVIGHSMQN	3322
SP P0C6V9 R1AB_BC279	TTLNGLWLDDTVYCPRHVICTAEDMLNPNYEDLLIRKSNHSFLVQAGNVQLRVIGHSMQN	3330
TR A0A0U1WHI4 A0A0U1WHI4_CVHSA	TTLNGLWLDDTVYCPRHVICTAEDMLNPNYEDLLIRKSNHSFLVQAGNVQLRVIGHSMQN	3319
TR A0A0U1WHG0 A0A0U1WHG0_CVHSA	TTLNGLWLDDTVYCPRHVVCTVEDMLNPNYEDLLIRKSNHSFLVQAGNVQLRVIGHSMQN	3319
TR A0A166ZL34 A0A166ZL34_9NIDO	TTLNGLWLDDTVYCPRHVVCTVEDMLNPNYEDLLIRKSNHSFLVQAGNVQLRVIGHSMQN	3126
TR R9QTB2 R9QTB2_CVHSA	TTLNGLWLDDTVYCPRHVICTAEDMLNPNYEDLLIRKSNHSFLVQAGNVQLRVIGHSMQN	3316
TR R9QTH2 R9QTH2_CVHSA	TTLNGLWLDDTVYCPRHVICTAEDMLNPNYEDLLIRKSNHSFLVQAGNVQLRVIGHSMQN	3325
SP P0C6U8 R1A_CVHSA	TTLNGLWLDDTVYCPRHVICTAEDMLNPNYEDLLIRKSNHSFLVQAGNVQLRVIGHSMQN	3324
TR Q6JH47 Q6JH47_CVHSA	TTLNGLWLDDTVYCPRHVICTAEDMLNPNYEDLLIRKANHSFLVQAGNVQLRVIGHSMQN	3324
TR Q692E5 Q692E5_CVHSA	TTLNGLWLDDTVYCPRHVICTAEDMLNPNYEDLLIRKSNHSFLVQAGNVQLRVIGHSMQN	3324
SP P0C6F8 R1A_BCHK3	TTLNGLWLDDTVYCPRHVVCTAEDMLNPNYDDLIRKSNHSFLVQAGNVQLRVIGHSMQN	3318
TR A0A0K1Z0N1 A0A0K1Z0N1_CVHSA	TTLNGLWLDDTVYCPRHVICTAEDMLNPNYEDLLIRKSNHSFLVQAGNVQLRVIGHSMQN	3324
SP P0C6F5 R1A_BC279	TTLNGLWLDDTVYCPRHVICTAEDMLNPNYEDLLIRKSNHSFLVQAGNVQLRVIGHSMQN	3330
SP P0C6T7 R1A_BCRP3	TTLNGLWLDDTVYCPRHVICTAEDMLNPNYEDLLIRKSNHSFLVQAGNVQLRVIGHSMQN	3322

\*\*\*\*\*.\*\*\*\*\*: \*\* \*\*\*\*\*:\*\*\*\*\*:\*.\*\*\*\*:\*\*\*\*\*



QHN73794	CVLKLKVDTSNPKTPKYKFVRIQPGQTFSVLACYNGSPSGVYQCAMRPNHTIKGSFLNGS	3407
SP P0C6X7 R1AB_CVHSA	CLLRLKVDTSNPKTPKYKFVRIQPGQTFSVLACYNGSPSGVYQCAMRPNHTIKGSFLNGS	3384
TR Q6UZF5 Q6UZF5_CVHSA	CLLRLKVDTSNPKTPKYKFVRIQPGQTFSVLACYNGSPSGVYQCAMRPNHTIKGSFLNGS	3384
TR Q6UZF1 Q6UZF1_CVHSA	CLLRLKVDTSNPKTPKYKFVRIQPGQTFSVLACYNGSPSGVYQCAMRPNHTIKGSFLNGS	3384
TR Q6JH48 Q6JH48_CVHSA	CLLRLKVDTSNPKTPKYKFVRIQPGQTFSVLACYNGSPSGVYQCAMRPNHTIKGSFLNGS	3384
TR Q692E6 Q692E6_CVHSA	CLLRLKVDTSNPKTPKYKFVRIQPGQTFSVLACYNGSPSGVYQCAMRPNHTIKGSFLNGS	3384
TR A0A0K1YZY7 A0A0K1YZY7_CVHSA	CLLRLKVDTSNPKTPKYKFVRIQPGQTFSVLACYNGSPSGVYQCAMRPNHTIKGSFLNGS	3384
SP P0C6W2 R1AB_BCHK3	CLLRLKVDTSNPKTPKYKFVRIQPGQTFSVLACYNGSPSGVYQCAMRPNHTIKGSFLNGS	3378
SP P0C6W6 R1AB_BCRP3	CLLRLKVDTSNPKTPKYKFVRIQPGQTFSVLACYNGSPSGVYQCAMRPNHTIKGSFLNGS	3382
SP P0C6V9 R1AB_BC279	CLLRLKVDTSNPKTPKYKFVRIQPGQTFSVLACYNGSPSGVYQCAMRPNHTIKGSFLNGS	3390
TR A0A0U1WHI4 A0A0U1WHI4_CVHSA	CLLRLKVDTSNPKTPKYKFVRIQPGQTFSVLACYNGSPSGVYQCAMRPNHTIKGSFLNGS	3379
TR A0A0U1WHG0 A0A0U1WHG0_CVHSA	CLLRLKVDTSNPKTPKYKFVRIQPGQTFSVLACYNGSPSGVYQCAMRPNHTIKGSFLNGS	3379
TR A0A166ZL34 A0A166ZL34_9NIDO	CLLRLKVDTSNPKTPKYKFVRIQPGQTFSVLACYNGSPSGVYQCAMRPNHTIKGSFLNGS	3186
TR R9QTB2 R9QTB2_CVHSA	CLLRLKVDTSNPKTPKYKFVRIQPGQTFSVLACYNGSPSGVYQCAMRPNHTIKGSFLNGS	3376
TR R9QTH2 R9QTH2_CVHSA	CLLRLKVDTSNPKTPKYKFVRIQPGQTFSVLACYNGSPSGVYQCAMRPNHTIKGSFLNGS	3385
SP P0C6U8 R1A_CVHSA	CLLRLKVDTSNPKTPKYKFVRIQPGQTFSVLACYNGSPSGVYQCAMRPNHTIKGSFLNGS	3384
TR Q6JH47 Q6JH47_CVHSA	CLLRLKVDTSNPKTPKYKFVRIQPGQTFSVLACYNGSPSGVYQCAMRPNHTIKGSFLNGS	3384
TR Q692E5 Q692E5_CVHSA	CLLRLKVDTSNPKTPKYKFVRIQPGQTFSVLACYNGSPSGVYQCAMRPNHTIKGSFLNGS	3384
SP P0C6F8 R1A_BCHK3	CLLRLKVDTSNPKTPKYKFVRIQPGQTFSVLACYNGSPSGVYQCAMRPNHTIKGSFLNGS	3378
TR A0A0K1Z0N1 A0A0K1Z0N1_CVHSA	CLLRLKVDTSNPKTPKYKFVRIQPGQTFSVLACYNGSPSGVYQCAMRPNHTIKGSFLNGS	3384
SP P0C6F5 R1A_BC279	CLLRLKVDTSNPKTPKYKFVRIQPGQTFSVLACYNGSPSGVYQCAMRPNHTIKGSFLNGS	3390
SP P0C6T7 R1A_BCRP3	CLLRLKVDTSNPKTPKYKFVRIQPGQTFSVLACYNGSPSGVYQCAMRPNHTIKGSFLNGS	3382

\*.\*:\*\*\*\*\*:\*\*\*\*\*.\*\*\*\*\*



QHN73794 CGSVGFNIDYDCVSFCYMHHMELPTGVHAGTDLEGNFYGPFVDRQTAQAAGDTTITVNV 3467  
SP|P0C6X7|R1AB\_CVHSA CGSVGFNIDYDCVSFCYMHHMELPTGVHAGTDLEKFGYGPVDRQTAQAAGDTTITLNV 3444  
TR|Q6UZF5|Q6UZF5\_CVHSA CGSVGFNIDYDCVSFCYMHHMELPTGVHAGTDLEKFGYGPVDRQTAQAAGDTTITLNV 3444  
TR|Q6UZF1|Q6UZF1\_CVHSA CGSVGFNIDYDCVSFCYMHHMELPTGVHAGTDLEKFGYGPVDRQTAQAAGDTTITLNV 3444  
TR|Q6JH48|Q6JH48\_CVHSA CGSVGFNIDYDCVSFCYMHHMELPTGVHAGTDLEKFGYGPVDRQTAQAAGDTTITLNV 3444  
TR|Q692E6|Q692E6\_CVHSA CGSVGFNIDYDCVSFCYMHHMELPTGVHAGTDLEKFGYGPVDRQTAQAAGDTTITLNV 3444  
TR|A0A0K1YZY7|A0A0K1YZY7\_CVHSA CGSVGFNIDYDCVSFCYMHHMELPTGVHAGTDLEKFGYGPVDRQTAQAAGDTTITLNV 3444  
SP|P0C6W2|R1AB\_BCHK3 CGSVGFNIDYDCVSFCYMHHMELPTGVHAGTDLEKFGYGPVDRQTAQAAGDTTITLNV 3438  
SP|P0C6W6|R1AB\_BCRP3 CGSVGFNIDYDCVSFCYMHHMELPTGVHAGTDLEKFGYGPVDRQTAQAAGDTTITLNV 3442  
SP|P0C6V9|R1AB\_BC279 CGSVGFNIDYDCVSFCYMHHMELPTGVHAGTDLEKFGYGPVDRQTAQAAGDTTITLNV 3450  
TR|A0A0U1WHI4|A0A0U1WHI4\_CVHSA CGSVGFNIDYDCVSFCYMHHMELPTGVHAGTDLEKFGYGPVDRQTAQAAGDTTITLNV 3439  
TR|A0A0U1WHG0|A0A0U1WHG0\_CVHSA CGSVGFNIDYDCVSFCYMHHMELPTGVHAGTDLEKFGYGPVDRQTAQAAGDTTITLNV 3439  
TR|A0A166ZL34|A0A166ZL34\_9NIDO CGSVGFNIDYDCVSFCYMHHMELPTGVHAGTDLEKFGYGPVDRQTAQAAGDTTITLNV 3246  
TR|R9QTB2|R9QTB2\_CVHSA CGSVGFNIDYDCVSFCYMHHMELPTGVHAGTDLEKFGYGPVDRQTAQAAGDTTITLNV 3436  
TR|R9QTH2|R9QTH2\_CVHSA CGSVGFNIDYDCVSFCYMHHMELPTGVHAGTDLEKFGYGPVDRQTAQAAGDTTITLNV 3445  
SP|P0C6U8|R1A\_CVHSA CGSVGFNIDYDCVSFCYMHHMELPTGVHAGTDLEKFGYGPVDRQTAQAAGDTTITLNV 3444  
TR|Q6JH47|Q6JH47\_CVHSA CGSVGFNIDYDCVSFCYMHHMELPTGVHAGTDLEKFGYGPVDRQTAQAAGDTTITLNV 3444  
TR|Q692E5|Q692E5\_CVHSA CGSVGFNIDYDCVSFCYMHHMELPTGVHAGTDLEKFGYGPVDRQTAQAAGDTTITLNV 3444  
SP|P0C6F8|R1A\_BCHK3 CGSVGFNIDYDCVSFCYMHHMELPTGVHAGTDLEKFGYGPVDRQTAQAAGDTTITLNV 3438  
TR|A0A0K1Z0N1|A0A0K1Z0N1\_CVHSA CGSVGFNIDYDCVSFCYMHHMELPTGVHAGTDLEKFGYGPVDRQTAQAAGDTTITLNV 3444  
SP|P0C6F5|R1A\_BC279 CGSVGFNIDYDCVSFCYMHHMELPTGVHAGTDLEKFGYGPVDRQTAQAAGDTTITLNV 3450  
SP|P0C6T7|R1A\_BCRP3 CGSVGFNIDYDCVSFCYMHHMELPTGVHAGTDLEKFGYGPVDRQTAQAAGDTTITLNV 3442  
\*\*\*\*\*:\*\*\*\*\*:\*\*\*

QHN73794 LAWLYAAVINGDRWFLNRFTTTLNDFNLVAMKYNIEPLTQDHVDILGPLSAQTGIAVLDM 3527  
SP|P0C6X7|R1AB\_CVHSA LAWLYAAVINGDRWFLNRFTTTLNDFNLVAMKYNIEPLTQDHVDILGPLSAQTGIAVLDM 3504  
TR|Q6UZF5|Q6UZF5\_CVHSA LAWLYAAVINGDRWFLNRFTTTLNDFNLVAMKYNIEPLTQDHVDILGPLSAQTGIAVLDM 3504  
TR|Q6UZF1|Q6UZF1\_CVHSA LAWLYAAVINGDRWFLNRFTTTLNDFNLVAMKYNIEPLTQDHVDILGPLSAQTGIAVLDM 3504  
TR|Q6JH48|Q6JH48\_CVHSA LAWLYAAVINGDRWFLNRFTTTLNDFNLVAMKYNIEPLTQDHVDILGPLSAQTGIAVLDM 3504  
TR|Q692E6|Q692E6\_CVHSA LAWLYAAVINGDRWFLNRFTTTLNDFNLVAMKYNIEPLTQDHVDILGPLSAQTGIAVLDM 3504  
TR|A0A0K1YZY7|A0A0K1YZY7\_CVHSA LAWLYAAVINGDRWFLNRFTTTLNDFNLVAMKYNIEPLTQDHVDILGPLSAQTGIAVLDM 3504  
SP|P0C6W2|R1AB\_BCHK3 LAWLYAAVINGDRWFLNRFTTTLNDFNLVAMKYNIEPLTQDHVDILGPLSAQTGIAVLDM 3498  
SP|P0C6W6|R1AB\_BCRP3 LAWLYAAVINGDRWFLNRFTTTLNDFNLVAMKYNIEPLTQDHVDILGPLSAQTGIAVLDM 3502  
SP|P0C6V9|R1AB\_BC279 LAWLYAAVINGDRWFLNRFTTTLNDFNLVAMKYNIEPLTQDHVDILGPLSAQTGIAVLDM 3510  
TR|A0A0U1WHI4|A0A0U1WHI4\_CVHSA LAWLYAAVINGDRWFLNRFTTTLNDFNLVAMKYNIEPLTQDHVDILGPLSAQTGIAVLDM 3499  
TR|A0A0U1WHG0|A0A0U1WHG0\_CVHSA LAWLYAAVINGDRWFLNRFTTTLNDFNLVAMKYNIEPLTQDHVDILGPLSAQTGIAVLDM 3499  
TR|A0A166ZL34|A0A166ZL34\_9NIDO LAWLYAAVINGDRWFLNRFTTTLNDFNLVAMKYNIEPLTQDHVDILGPLSAQTGIAVLDM 3306  
TR|R9QTB2|R9QTB2\_CVHSA LAWLYAAVINGDRWFLNRFTTTLNDFNLVAMKYNIEPLTQDHVDILGPLSAQTGIAVLDM 3496  
TR|R9QTH2|R9QTH2\_CVHSA LAWLYAAVINGDRWFLNRFTTTLNDFNLVAMKYNIEPLTQDHVDILGPLSAQTGIAVLDM 3505  
SP|P0C6U8|R1A\_CVHSA LAWLYAAVINGDRWFLNRFTTTLNDFNLVAMKYNIEPLTQDHVDILGPLSAQTGIAVLDM 3504  
TR|Q6JH47|Q6JH47\_CVHSA LAWLYAAVINGDRWFLNRFTTTLNDFNLVAMKYNIEPLTQDHVDILGPLSAQTGIAVLDM 3504  
TR|Q692E5|Q692E5\_CVHSA LAWLYAAVINGDRWFLNRFTTTLNDFNLVAMKYNIEPLTQDHVDILGPLSAQTGIAVLDM 3504  
SP|P0C6F8|R1A\_BCHK3 LAWLYAAVINGDRWFLNRFTTTLNDFNLVAMKYNIEPLTQDHVDILGPLSAQTGIAVLDM 3498  
TR|A0A0K1Z0N1|A0A0K1Z0N1\_CVHSA LAWLYAAVINGDRWFLNRFTTTLNDFNLVAMKYNIEPLTQDHVDILGPLSAQTGIAVLDM 3504  
SP|P0C6F5|R1A\_BC279 LAWLYAAVINGDRWFLNRFTTTLNDFNLVAMKYNIEPLTQDHVDILGPLSAQTGIAVLDM 3510  
SP|P0C6T7|R1A\_BCRP3 LAWLYAAVINGDRWFLNRFTTTLNDFNLVAMKYNIEPLTQDHVDILGPLSAQTGIAVLDM 3502  
\*\*\*\*\*:\*\*\*\*\*

QHN73794		CASLKELLQNGMNGRTILGSALLEDEFTPFDDVVRQCSGVTFQSAVKRTIKGTHHWLLTI	3587
SP	P0C6X7 R1AB_CVHSA	CAALKELLQNGMNGRTILGSTILEDEFTPFDDVVRQCSGVTFQGKFKKIVKGTHHWMLLTF	3564
TR	Q6UZF5 Q6UZF5_CVHSA	CAALKELLQNGMNGRTILGSTILEDEFTPFDDVVRQCSGVTFQGKFKKIVKGTHHWMLLTF	3564
TR	Q6UZF1 Q6UZF1_CVHSA	CAALKELLQNGMNGRTILGSTILEDEFTPFDDVVRQCSGVTFQGKFKKIVKGTHHWMLLTF	3564
TR	Q6JH48 Q6JH48_CVHSA	CAALKELLQNGMNGRTILGSTILEDEFTPFDDVVRQCSGVTFQGKFKKIVKGTHHWMLLTF	3564
TR	Q692E6 Q692E6_CVHSA	CAALKELLQNGMNGRTILGSTILEDEFTPFDDVVRQCSGVTFQGKFKKIVKGTHHWMLLTF	3564
TR	A0A0K1YZY7 A0A0K1YZY7_CVHSA	CAALKELLQNGMNGRTILGSTILEDEFTPFDDVVRQCSGVTFQGKFKKIVKGTHHWMLLTF	3564
SP	P0C6W2 R1AB_BCHK3	CAALKELLQNGMNGRTILGSTILEDEFTPFDDVVRQCSGVTFQGKFKKIVKGTHHWMLLTF	3558
SP	P0C6W6 R1AB_BCRP3	CAALKELLQNGMNGRTILGSTILEDEFTPFDDVVRQCSGVTFQGKFKKIVKGTHHWMLLTF	3562
SP	P0C6V9 R1AB_BC279	CAALKELLQNGMNGRTILGSTILEDEFTPFDDVVRQCSGVTFQGKFKKIVKGTHHWMLLTF	3570
TR	A0A0U1WHI4 A0A0U1WHI4_CVHSA	CAALKELLQNGMNGRTILGSTILEDEFTPFDDVVRQCSGVTFQGKFKKIVKGTHHWMLLTF	3559
TR	A0A0U1WHG0 A0A0U1WHG0_CVHSA	CAALKELLQNGMNGRTILGSTILEDEFTPFDDVVRQCSGVTFQGKFKKIVKGTHHWMLLTF	3559
TR	A0A166ZL34 A0A166ZL34_9NIDO	CAALKELLQNGMNGRTILGSTILEDEFTPFDDVVRQCSGVTFQGKFKKIVKGTHHWMLLTF	3366
TR	R9QTB2 R9QTB2_CVHSA	CAALKELLQNGMNGRTILGSTILEDEFTPFDDVVRQCSGVTFQGKFKKIVKGTHHWMLLTF	3556
TR	R9QTH2 R9QTH2_CVHSA	CAALKELLQNGMNGRTILGSTILEDEFTPFDDVVRQCSGVTFQGKFKKIVKGTHHWMLLTF	3565
SP	P0C6U8 R1A_CVHSA	CAALKELLQNGMNGRTILGSTILEDEFTPFDDVVRQCSGVTFQGKFKKIVKGTHHWMLLTF	3564
TR	Q6JH47 Q6JH47_CVHSA	CAALKELLQNGMNGRTILGSTILEDEFTPFDDVVRQCSGVTFQGKFKKIVKGTHHWMLLTF	3564
TR	Q692E5 Q692E5_CVHSA	CAALKELLQNGMNGRTILGSTILEDEFTPFDDVVRQCSGVTFQGKFKKIVKGTHHWMLLTF	3564
SP	P0C6F8 R1A_BCHK3	CAALKELLQNGMNGRTILGSTILEDEFTPFDDVVRQCSGVTFQGKFKKIVKGTHHWMLLTF	3558
TR	A0A0K1Z0N1 A0A0K1Z0N1_CVHSA	CAALKELLQNGMNGRTILGSTILEDEFTPFDDVVRQCSGVTFQGKFKKIVKGTHHWMLLTF	3564
SP	P0C6F5 R1A_BC279	CAALKELLQNGMNGRTILGSTILEDEFTPFDDVVRQCSGVTFQGKFKKIVKGTHHWMLLTF	3570
SP	P0C6T7 R1A_BCRP3	CAALKELLQNGMNGRTILGSTILEDEFTPFDDVVRQCSGVTFQGKFKKIVKGTHHWMLLTF	3562

\*\*:\*\*\*\*\*:\*\*\*\*\*. .\*:\*\*\*\*\*:\*\*\*: