

CLUSTAL O(1.2.4) multiple sequence alignment

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VOG0765|YP_009168399.1      -----mgvgsddl-----lmwfstlsv 17
VOG0765|YP_007238025.1      -----meki-sslinyligli-----lmwfggrhtp 24
LYP264_contig_1_phanotate_45_geneCall -----MGLTMEKI-TTFLTYWLSVV-----LAYFGTQTP 28
VOG0765|VOG5078|YP_002308524.1 -----m--slnmseky-atptaylssl-----atvlgffftl 29
VOG0765|YP_009207761.1      -----mhk-teqasyf-gai-----fgffgsllt 22
VOG0765|YP_655476.1         -----mhk-teqasyf-gai-----fgffgsllt 22
VOG0765|NP_536380.1         -----mrasp-teavsysa-gsi-----asvassltl 24
VOG0765|NP_945053.1         -----mrasp-teavsysa-gsi-----asvassltl 24
VOG0765|YP_001111103.1      -----maalfhc--eglmrasp-sevasyv-gsv-----tavassltl 34
VOG0765|YP_355394.1         -----mrasp-tevasyv-gsv-----tavassltl 24
VOG0765|VOG5078|YP_008766847.1 -----mnqwlqn-qwfg-----ewfekl-tsyaaylmsgl-----gvflgllsi 37
VOG0765|VOG5078|NP_536659.1 -----mnqwlqn-qwfg-----ewfekl-tsyaaylmsgl-----gvflgllsi 37
VOG0765|YP_009224686.1      -----mlsnvwlncchwvseligdfys-----kvsllgtstl-----iiwmg---g 37
VOG0765|YP_009204841.1      -----mikvgdmvgpdlatragaaavgatv-----sggwlaelms 35
VOG0765|YP_009006072.1      -----mikvgdmvgsdlatragaaavgatv-----sggwlaelms 35
VOG0765|YP_009188365.1      -----mikvgdvvgdlatragaaavgatv-----sggwlaelms 35
VOG0765|YP_003347649.1      -----mikvgdvtvgadlatragaaavgatv-----sggwlaelms 35
VOG0765|YP_009188795.1      -----mikvgdmvgadlatragaaavgatv-----sggwlaelms 35
VOG0765|YP_009199935.1      -----mikvgdmvgadlatragaaavgatv-----sggwlaelms 35
VOG0765|YP_001718741.1      -----mtleri-safityciavl-----lawlgdls- 25
VOG0765|YP_007003515.1      -----mtleri-safityciavl-----lawlgdls- 25
VOG0765|YP_006383881.1      -----myrmdki-rewfsysfgglta-----maggilsl 27
VOG0765|YP_006396.1         -----myrmdki-rewfsysfgglta-----maggilsl 27
VOG0765|YP_009191504.1      -----myrmdki-rewfsysfgglta-----maggilsl 27
VOG0765|YP_006560614.1      -----myrmdki-rewfsysfgglta-----maggilsl 27
VOG0765|YP_006560881.1      -----myrmdki-rewfsysfgglta-----maggilsl 27
VOG0765|YP_002455880.1      -----myrmdki-rewfsysfgglta-----maggilsl 27
VOG0765|VOG3381|YP_654739.1 -----mfkn-teqnayfgsav-----aaffaq 21
VOG0765|YP_007947980.1      -----myrmdkl-ttgaaygasagsi---lmgmlnaysp 30
VOG0765|YP_007006942.1      -----mrmsnf-ttgaaygasggsflfwfkkllldgysp 32
VOG0765|YP_001449283.1      -----myqmeki-ttgvsyttssavgtgywllqllldrvsp 33
VOG0765|YP_009180936.1      -----mnqmeki-ttgvsyttssavgtgywflqllldrvsp 33
VOG0765|YP_009187865.1      -----mnqmeki-ttgvsyttssavgtgywflqllldrvsp 33
VOG0765|YP_006906867.1      mrqggsvcaggflycc-elpdcgrrgmymeki-ttgvsyttssavgtgywflqllldrvsp 58
VOG0765|YP_009168143.1      -----myqmeki-ttgvsyttssavgtgywflqllldrvsp 33
VOG0765|NP_859403.1         -----myqmeki-ttgvsyttssavgtgywflqllldrvsp 33
VOG0765|YP_009226871.1      -----myqmeki-ttgvsyttssavgtgywflqllldrvsp 33
VOG0765|NP_859232.1         mrqggsvcaggflycc-elpdcgrrgmymeki-ttgvsyttssavgtgywflqllldrvsp 58
VOG0765|NP_049504.1         -----myqmeki-ttgvsyttssavgtgywflqllldrvsp 33
VOG0765|YP_001648937.1      -----myqmeki-ttgvsyttssavgtgywflqllldrvsp 33
VOG0765|NP_050543.1         mrqggsvcaggflycc-elpdcgrrgmymeki-ttgvsyttssavgtgywflqllldrvsp 58
VOG0765|YP_009190551.1      -----myqmeki-ttgvsyttssavgtgywflqllldrvsp 33
VOG0765|YP_794051.1         -----myqmeki-ttgvsyttssavgtgywflqllldrvsp 33
VOG0765|YP_007001462.1      -----myqmeki-ttgvsyttssavgtgywflqllldrvsp 33
VOG0765|YP_009147508.1      -----mksmdki-stgiaygtsagsagywflqllldrvsp 33
VOG0765|YP_001272570.1      -----mksmdkl-ttgvaagtsagsagywflqllldrvsp 33
VOG0765|YP_007112128.1      ----matsgglfisitqhpplrvgvmksmdkl-ttgvaagtsagsagywflqllldrvsp 54

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VOG0765 YP_009168399.1	aews---ymigafva-----vaslvgyfyfawkknkrdqeehdlkmeairrgikescs	67
VOG0765 YP_007238025.1	qeia---fmvgsgvavittvinvatffinwhyrrktyelqrqsvqgvnlepdr-----	74
LYP264_contig_1_phanotate_45_geneCall	ERLA---LYVGGGCA-----IFTALVNFWYQHKKYRYLVSMGIDKGVIRGLIR-----	73
VOG0765 VOG5078 YP_002308524.1	eqwv---avtgivct-----igtflinvyrrkkeyklkarhyddteknpdghrw----	75
VOG0765 YP_009207761.1	sdwg---vvvsilva-----iltlllnwayrakeyklkerefelklqnqgkkne----	68
VOG0765 YP_655476.1	sdwg---vvvsilva-----iltlllnwayrakeyklkerefelklqnqgkkne----	68
VOG0765 NP_536380.1	tdig---vivgilta-----iatfglnfyfarrkdrreqielaarlrelehhdg----	70
VOG0765 NP_945053.1	tdig---vivgilta-----iatfglnfyfarrkdrreqielaarlrelehhdg----	70
VOG0765 YP_001111103.1	tdig---vivgimta-----iatfglnfffmwrkdrreqresdmrilemerhdg----	80
VOG0765 YP_355394.1	tdig---vivgilta-----iatfglnfffmwrkdrreqresdmrimemekhhdg----	70
VOG0765 VOG5078 YP_008766847.1	eqwisi-----fv-----vtalvaniwhkramqkiakergiylne-----nn----	75
VOG0765 VOG5078 NP_536659.1	eqwisi-----fv-----vtalvaniwhkramqkiakergiylne-----nn----	75
VOG0765 YP_009224686.1	lnwnmifmvagflmg-----latllinwyykhknskvaefaskeaakrgyilnepke----	89
VOG0765 YP_009204841.1	wnwstisfitatvca-----vltlawnayykrtrfkllleeqarkgtikyefkd-----	83
VOG0765 YP_009006072.1	wnwstisfitatvca-----vltlawnayykrtrfkllleeqarkgtikyefkd-----	83
VOG0765 YP_009188365.1	wnwstisfitatvca-----vltlawnayykrtrfkllleeqarkgtikyefkd-----	83
VOG0765 YP_003347649.1	wnwstisfitatvca-----vltlawnayykrtrfkllleeqarkgtikyefkd-----	83
VOG0765 YP_009188795.1	wnwstisfitatvca-----vltlawnayykrtrfkllleeqarkgtikyefkd-----	83
VOG0765 YP_009199935.1	wnwstisfitatvca-----vltlawnayykrtrfkllleeqarkgtikyefkd-----	83
VOG0765 YP_001718741.1	--lkdastvggvlig-----vlmlainwyykhqsfkll--rggkisrgeyesfnr----	71
VOG0765 YP_007003515.1	--lkdastvggvlig-----vlmlainwyykhqsfkll--rggkisrgeyesfnr----	71
VOG0765 YP_006383881.1	ndwa---viigilct-----vgtfginwyykrkeredrlngnvtgttk-----	67
VOG0765 YP_006396.1	ndwa---viigilct-----vgtfginwyykrkeredrlngnvtgttk-----	67
VOG0765 YP_009191504.1	ndwa---viigilct-----vgtfginwyykrkeredrlngnvtgttk-----	67
VOG0765 YP_006560614.1	ndwa---viigilct-----vgtfginwyykrkeredrlngnvtgttk-----	67
VOG0765 YP_006560881.1	ndwa---viigilct-----vgtfginwyykrkeredrlngnvtgttk-----	67
VOG0765 YP_002455880.1	ndwa---viigilct-----vgtfginwyykrkeredrlngnvtgttk-----	67
VOG0765 VOG3381 YP_654739.1	lswgdigaifgilfg-----lltvltnwyfkrkedkraekalelmrdkynneks----	70
VOG0765 YP_007947980.1	eqwnaigvlvgiiaa-----vmtyltnlyfkirednrrsrsrdepnvee-----	74
VOG0765 YP_007006942.1	eqwaaigvlgs1afa-----gltf1tnlyfkikedrkrkaarge-----	70
VOG0765 YP_001449283.1	sqwvaigvlgs1lfg-----lltyltnlyfkiredrrkaarge-----	71
VOG0765 YP_009180936.1	sqwaaigvlgs1lfg-----lltyltnlyfkiredrrkaarge-----	71
VOG0765 YP_009187865.1	sqwaaigvlgs1lfg-----lltyltnlyfkiredrrkaarge-----	71
VOG0765 YP_006906867.1	sqwaaigvlgs1lfg-----lltyltnlyfkiredrrkaarge-----	96
VOG0765 YP_009168143.1	sqwaaigvlgs1lfg-----lltyltnlyfkikedrkrkaarge-----	71
VOG0765 NP_859403.1	sqwaaigvlgs1lfg-----lltyltnlyfkikedrkrkaarge-----	71
VOG0765 YP_009226871.1	sqwaaigvlgs1lfg-----lltyltnlyfkikedrkrkaarge-----	71
VOG0765 NP_859232.1	sqwaaigvlgs1lfg-----lltyltnlyfkikedrkrkaarge-----	96
VOG0765 NP_049504.1	sqwaaigvlgs1lfg-----lltyltnlyfkikedrkrkaarge-----	71
VOG0765 YP_001648937.1	sqwaaigvlgs1lfg-----lltyltnlyfkikedrkrkaarge-----	71
VOG0765 NP_050543.1	sqwaaigvlgs1lfg-----lltyltnlyfkikedrkrkaarge-----	96
VOG0765 YP_009190551.1	sqwaaigvlgs1lfg-----lltyltnlyfkiredrrkaarge-----	71
VOG0765 YP_794051.1	sqwaaigvlgs1lfg-----lltyltnlyfkiredrrkaarge-----	71
VOG0765 YP_007001462.1	sqwaaigvlgs1lfg-----lltyltnlyfkiredrrkaarge-----	71
VOG0765 YP_009147508.1	sqwaaigvlgs1vlfg-----fltyltnlyfkiredrrkaarge-----	71
VOG0765 YP_001272570.1	sqwaaigvlgs1vfg-----lltyltnlyfkikedrkrkaarge-----	71
VOG0765 YP_007112128.1	sqwaaigvlgs1vfg-----lltyltnlyfkikedrkrkaarge-----	92

CLUSTAL O(1.2.4) multiple sequence alignment

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VOG0765|VOG5078|YP_008766847.1      mnqwlqnqwfqewfekltsyiaylmsglgvflgllsieqwisifvgvta---lvaniwhk 57
VOG0765|VOG5078|NP_536659.1        mnqwlqnqwfqewfekltsyiaylmsglgvflgllsieqwisifvgvta---lvaniwhk 57
LYP264_contig_1_phanotate_45_geneCall -----MGLTMEK-----ITTFLTYWLSVVLAYFGTQTPERLALYVGGGCAIFTALVNFYQ 51
VOG0765|VOG5078|YP_002308524.1      -----mslnmsekyatptaylsslmatvl---gfftlegwvavtgivctigtflinvyrr 52
                                   .   .:.   *::::   :::   *   :   *:   :   :   *:::::

VOG0765|VOG5078|YP_008766847.1      ramqkiakergiylnenn----- 75
VOG0765|VOG5078|NP_536659.1        ramqkiakergiylnenn----- 75
LYP264_contig_1_phanotate_45_geneCall HKKYRYLVSMGIDKGVIRGLIR- 73
VOG0765|VOG5078|YP_002308524.1      kkeyklkarhyddteknpdghrw 75
                                   :   :

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CLUSTAL O(1.2.4) multiple sequence alignment

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VOG0765|VOG5078|YP_008766847.1      mnqwlqnqwfqewfekltsyiaylmsglgvflgllsieqwisifvgvta---lvaniwhk 57
VOG0765|VOG5078|NP_536659.1        mnqwlqnqwfqewfekltsyiaylmsglgvflgllsieqwisifvgvta---lvaniwhk 57
VOG0765|VOG5078|YP_002308524.1      -----mslnmsekyatptaylsslmatvl---gfftlegwvavtgivctigtflinvyrr 52
LYP264_contig_1_phanotate_45_geneCall -----MGLTMEK-----ITTFLTYWLSVVLAYFGTQTPERLALYVGGGCAIFTALVNFYQ 51
WP_087902590.1                      -----MGLTVDK-----ITTFLTYWLSVVLAYFGTQTPERLALYVGGSCAIFTALVNFYQ 51
                                   .   .:.   *::::   :::   *   :   *:   :   :   *:::::

VOG0765|VOG5078|YP_008766847.1      ramqkiakergiylnenn----- 75
VOG0765|VOG5078|NP_536659.1        ramqkiakergiylnenn----- 75
VOG0765|VOG5078|YP_002308524.1      kkeyklkarhyddteknpdghrw 75
LYP264_contig_1_phanotate_45_geneCall HKKYRYLVSMGIDKGVIRGLIR- 73
WP_087902590.1                      RKKYRYLVSMGIDKGVSRGLIR- 73
                                   :   :

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