Reference sequence (1): sample=62,
Identities normalised by aligned length.
Colored by: identity

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                          cov     pid    1 [         .         .         .         :         .         .         .         80
 1 sample=62,          100.0% 100.0%    PPIPLVLVSVYYGKGIANGHDFKLAGAGVGLPFLGVGVSVRYLTEGGGPLPFGIDILFLFPLAGNSVLIAYPEDIPNPFKD
 2 sample=3,           100.0%  42.9%    PVIKPVMPFVEVMVGSINGAKFALAGVGAGLPFLGVTVRAGYVVVGAPLPFALEPLTLIPRAFLAVFIAYPPDIPPALRA
 3 sample=46,          100.0%  42.4%    PPLPLVLWGVGLTVGDFNGQPFAMASVFAGIPYLGFSVEYRVIFGGPLKFDIDVLVPVPFAARGVLTRFPPDIPDFLRA
 4 sample=89,          100.0%  45.6%    DPIGPVLFYVGVTTGSINGQPFASVSVGAGLPYAGWSVSVSAVVAGAPLKFSIYVLTLAPLAGELVFAAWPPDIADFARA
 5 sample=100,         100.0%  50.2%    PPLPLVLPTVEFMYGVGVKINGHPFAILGVGGGSPFLGVSVEVRRVIAGGPLPFSIDVLALIPLAARGVLIAWPPDIPDFLRA
 6 sample=31,          100.0%  42.4%    PVLGPFLGFVVYYAGEINGHPFAMVGVGAGLPPLGVVVTYNRVVAGAPLPFSLDVPLPFPSGGLGVFAAWPADIPHPFRA
 7 sample=75,          100.0%  43.3%    PVLPPFLFFLEYTYGSVNGVKFARVGVGAGLPFKGIAYAYRRVVFGGPLPFSYYILLPIPLGGLGVAAAYPPDIPHYLHA
 8 sample=9,           100.0%  49.8%    PPLPPVMGYVSLLYGSINGHPFLIAGVGVGSPELGLAAEVRYLIAGGPLPFDFYILATVPLGSRLVFTRYPPDIPPVFRL
 9 sample=12,          100.0%  46.1%    SPLKPVMFGVYYQTGSINGKPFGIVGVFAGLPDLGFSVEVRYVFAGGPLPFDPYILAPVPFVASSVFVAYPPDIPDFLKA
10 sample=88,          100.0%  41.9%    GPVPPFLWFVGYYAGDINGHKFAIASVGAGNPLRGEWAAVNYVTFGGGPLPFSPEIILPFPLYFTSVLIAYPPDIPDWARA
11 sample=97,          100.0%  44.7%    SPLKPFQFFVYYLRGSINGKKFKIAGVGAGRPFEGEGVETRRVIDGGPLDFSIYVLPYGLPFRAVFIAYPPDIPDYIRA
12 sample=23,          100.0%  41.0%    PVLPLVGFFYEVTAGAINGQPFLIVGAGAGIPDLGVLVSVRAVVFGAPLKFSLYPLVPIPFLALLPFAAYPPDIPDFVKA
13 sample=70,          100.0%  40.6%    GPLGPRMPFRYYQAGQVNGVPFARLGVGDGSPFEGKLERRDRLVAGAPLPFSYDLLALVGLASEGVFAAYPADLPDYLRD
14 sample=59,          100.0%  43.3%    SPVGPWLLKLSYTVGKINGHPFAILGVGGGSPFLGVSVEVRRVIAGGPLPFSIDVLAPYGIVSNGVFTRWPPDIPRFLLD
15 sample=76,          100.0%  42.9%    SPIRPVQPLYLLMYGNINGHKFAIAGVGVGIPRLGVSVLLLRVVVGGPLPFSIDVLVPYPAPILAVAVAFPPDLPHPLRA
16 sample=60,          100.0%  41.9%    PVLPPLLASYVVLGGEINGHPFLELGVGVGTPFLGGWWRYRRVVYGGPIPFSYDPLLLVPFAADAVFIAWPPDIPDPLKN
17 sample=15,          100.0%  45.2%    SPVKPFLPWLEVQAGVINGQPFARVGAGAGLPYEGKWVAVRHLVAGGPLKFSIDVLLPIPFGASLVFAKFPEDIPHFVRD
18 sample=8,           100.0%  42.9%    GPLGPVLPFVGYMAGTYNGHPFAIASVGVGLPDAGVAWGVSGVVFGGPLPFDIYVLLLYPAAPLGVLTIAYPPDIPDWRRA
19 sample=92,          100.0%  43.8%    PPIPEDLRYVGVQAGSINGEPYLRAGVGRGRVYAGELESYNAIVAGGPLKFSLDILLFPLPLAATGVFIAFPPDIPPVLKD
20 sample=35,          100.0%  46.1%    SPVKDVLPFLGLTYGNINGHDFLIASAGIGNPKAGVATGVYYVLYGGGPLPFSLDVLTLFPFAALGVFIAFPDDIPDFLRA
21 sample=69,          100.0%  44.2%    SPLGPFLVWLGYTHGNINGHDFSILSAGAGVPPLGFAVEYRRVVAGGPLPFSRDVIDFVPFSALLVFAAFPPDIPPFVRA
22 sample=96,          100.0%  41.5%    GPLGPVALMLYYGVGSINGHPFATAGVGAGIPFLGLMVAYRRVVFGGPLPFSWDVLALVPFGPGAVFARFPPDIPPFVHA
23 sample=28,          100.0%  44.2%    PWLRDFGVLVELLYGDINGQODFRGVGVSVRAVVFGGPLPFSLEIIAPFGFGARSVLIAWPPGIPPYLHD
24 sample=48,          100.0%  43.3%    NAIGPFLGYLEYLSGWINGHPFRLLGVGAGRPDEGKGWEVYAVTAGAPLPFDPLVIVPFPFAGRGVFTKWPPDIPNPIKA
25 sample=14,          100.0%  40.6%    PVIGPFLGYLYGQWGTANGEKFGRVGVGAGFPDLGITAGVDAYFYNAPLKFSIDILAPYPFAGLGVMTKWPPDIPNFLRD
26 sample=10,          100.0%  42.9%    SALQDKLAAVYYTAGTINGHPFAIVGVGYGEPKKGKWKAVNRIVYGAPLPFDIDILLPYPLPASSVFIAYPPDIPPFFQA
27 sample=87,          100.0%  44.2%    EPLGPVQAGVEYLFGAINGEPFRILGASVGLPFLGLTAAYRRVTYGGPLTFDINVLLLNPLGPRGVFVAYPPDIPDFLRA
28 sample=83,          100.0%  43.8%    SPIPLLLAYLYYLAGDINGHPFTIVGVGAGFPYLGIRASVRAVTFGGPLPFSFPIGRASVFVKYPPSIPDFLRA
29 sample=45,          100.0%  46.1%    EPLGPVLPFVLVMGGAFNGQPFVVVGVGVGNPYLGTAAVLAVVAGGPLTFDPDVLAPVSLGGLGVFIAFPPDIPPFLRD
30 sample=51,          100.0%  43.8%    EPIGRFLPFVSVIAGTINGYPFVMLGAGAGWPDLGVWYGVYVVAGAPLPFSLDILLPRFFAASGVFAAWPPDIPNFIRL
31 sample=24,          100.0%  45.6%    GPIGPVMPFLYYLYGNINGQDFAIVGAGVGLPEAGLWVSAWYYVYGGPIKFDIYILAPVPLGATLVFTAWPPDLPDPFRD
32 sample=93,          100.0%  43.8%    APIGPFMVGVLYMYGNINGHDFLILGVGYGLPYLGISYSNNVVVYGGPLPFDINVLVPVPLAASGVFAAYYPPTIPDFLKA
33 sample=27,          100.0%  47.0%    APLGPWQPVLKYMAGNINGQKFAIAGAGFGSPERGWNVEARYVAGGPLPFSIDVLTPAGLAANMVFCAFPPDIPNFVRD
34 sample=55,          100.0%  43.8%    PVLQPFMAYLRLVAGVINGHPFAYAGVGAGLVPLGVRVGAYGFVAGGPLPFSIDILVPYGGAGDGVFVSYPPDIPHVLRA
35 sample=53,          100.0%  45.2%    EPVKPFMPYVYYLYGTINGHPFAIAGVGAGFPYLGLGAELRYVVYGGPLPFSIDVLVPVGGAASGVFTKYPPDIPHTLRL
36 sample=68,          100.0%  42.4%    EVLKPVQFFVFLMAGAINGEPFGIAGVGVPFLGVYAEVRRLVFGGPLKFSIDVLALFPSASDLPFARWPPDIPPTLRL
37 sample=86,          100.0%  39.2%    PVLLPVMPYVFYYIRGTVNGHPFGIAGAGVGLPDLGVWVRYTRVVKGAPLPFSRDIVTPVGLAGLTVFAAYPPDIPDFVKE
38 sample=29,          100.0%  43.8%    PPIKPFQWYVQYLAGAINGHPFRMAGVGAGLPFLGVGAGYWRVTAGGPLPVCFDVLAPLGAGSLLVFIKFPADIRDALRD
39 sample=11,          100.0%  44.2%    SWIQPVLPFVGLTVGTVNGHAFAMAGAGVGLPFLGISAAYNYVIAGGPLPFDIYILVPSGLAARLVFIIYFPPDIPNFVQD
40 sample=66,          100.0%  49.3%    GPLGLVQPWVEYGTGTLNGHNFAYLGAGVGLPFLGVWASARRVVAGGPLPFDITVLVPAGLAGRGVFAAYPDDIPNTLRA
41 sample=4,           100.0%  49.8%    SPILPFLFSVEYYAGNVEEGHPFAIAGVGAGFPNTGTGFAARRVLAGAPLPFSVDILLPFPLPSRMVFVGFPPDIPDTLRA
42 sample=40,          100.0%  44.2%    SPIKPVMFSVEYTAGSINGHPFATLGVGGLPFLGVSLSVRAVVAGGPLPYSIYVLLPLPFASRSVFTKFPPDIPDFRRA
43 sample=82,          100.0%  44.2%    EVLGDVMFYAYGQWGTINGNFASLGVGVGNPYKGEFVAVRYLTWGGGPLPFDIDVLTLYPFAGTSVFINWPPDIPNFLQE
44 sample=43,          100.0%  42.9%    PVLKPVLGFVLYMRGDINGHKFGIVGAGAGRPFEGRYRAYLRVGFGGPLPFSIYVLALLPTAAYSVFIAFPPDIPHFLHD
45 sample=21,          100.0%  47.0%    PPLKLVDPYVYYLDGNINGQKFKILGVGVGLPFLGVAVSSYWGFTDGAPIKYSIDIILPIPRAALGVFIAFPPDIPDFLRA
46 sample=72,          100.0%  44.2%    SPIPPLLAYADVLVGTINGHPFVIAGVGAGPVPALGWGVRVVAVAGGPLPFSIDTLLPFSFPAYAVAVRWPPDLAHFFRA
47 sample=47,          100.0%  43.8%    EPLKPFMFYVEVMTGTIINGYGFTILGVGYGFPFLGVEFSVRAIVAGAPLPFSIDVLPVPVGRSVFIAFPPDIPDWLRA
48 sample=30,          100.0%  44.2%    PVLKPFQFYLYYLAGAINGHPFAIAGAGAGLPFLGIFASVWAAVVAGAPLPFAIGLLLPYPLGGLGVFIAFPDDIPNFIKD
49 sample=36,          100.0%  45.2%    SPIKPYLFYAYYAAGRLNGHPFGILGAGYGKPFEGETYSYRQVVFGGPLPFSFWVLLPYPLAGLGVFAAFPPDIPDFLRD
50 sample=84,          100.0%  45.6%    PVLGDRMWLGYTAGAINGHPFAIAGVGVGDPRKGVFIALWVYVVAGGPLPFSIDVLVPFPFPGIAVFAAYPPDIPDFLRD
51 sample=85,          100.0%  44.7%    SPLKPVQPFVLLTAGAINGHPFAIAGVGYGFPFLGLVVQYNYLVVGGGPLPFDIDILLPFPFGGLGVFTRWPPDLPHFLQD
52 mRFP_SWISS_MODEL,   100.0%  34.1%    DVIKEFMRFKVRMEGSVNGHEFEIEGEGEGRPYEGTQTAKLKVTKGGPLPFAWDILSPQFQYGSKAYVKHPADIPDYLKL
53 sample=6,           100.0%  41.5%    AAIKDVLPYYYVQVGNINGHFFVGAGVGLGTPSKGVSVSVYHVIFGGPLPFDPYLLLLTGAGARSVFIAWPPDLPDFVRD
54 sample=13,          100.0%  42.4%    SALKPWMGFVYYLNGSVNGHKFKMAGVGVGAPFLGVTVAALYLVAGGPLKFDPSILFLFGLGFFGVFFKFPPDIPDFVRG
55 sample=90,          100.0%  42.4%    RPVKLVMPFVEYLYGNFNGQODFAILSVGLDGLGISASVRYCVYGCPLTFSIDPLVPVPLAGRAVFARFPPDIPNPLKE
56 sample=81,          100.0%  42.4%    RPVGPLQFGVGVLRGSVNGEDFARVSAEVMFPDVGFSVSVGVDGVYGAPLKFSNYYILLLVPLYPRLVAVAYPPDIPDFVRA
57 sample=65,          100.0%  38.2%    PVLKDEQWYVYVGFGSINGYGFGIAGVGYGFPDKGYLKGYYLVFAGGPLPFSIYVLILEPFAASSVFITRWGDDIPPFVRL
58 sample=49,          100.0%  41.9%    SPVQKNLYFTLKVKGSINGQSFEIKGVGYGNPFDGTWTRYVEVVKGAPLKFAFEVLAPVPIASDGVFFAYPPDIPNTLQL
59 sample=25,          100.0%  44.2%    SVVGPVLFGVEALSGDANGIKFDVAGVSVGLPPLGISASYRRCTIAGCPLPFSIYVLTPFGLVSRGVFIKRPPDIPNFLRD
60 sample=22,          100.0%  45.2%    EPLGDHLGFLRYARGSINGHDFAELAAGYGNPNRGWGVEARYVLAGGPLPFSREVLLPFPLVARGVFAAYPPDIPDFLRA
61 sample=33,          100.0%  41.9%    SPIKLFMPYVYYLRGEIEGIKFSVAGVGAGLPFGGFAVGANYVTGGGGPLPFDIGALLPIPFMGLAVFTKWPPDIPPWVKE
62 sample=95,          100.0%  39.6%    SVVQPLMFYKLYNQKGDINGHKFKIKGVGAGIPFLGLSASYNEVTEGGGPLPFSIDVLLPVPLAGLGVFIKFPPDIPNFIKD
63 sample=32,          100.0%  46.1%    PPLGPRQFFRLTMEGDINGYKFKIEGEGYGRPELGFYLEYRKLVEGGPLPFSYDVLLPYPFVGGSVFIAYPPDIPPFLRD
64 sample=71,          100.0%  44.2%    SPIKPFLYVEYTDGDANGDDFDILGAGAGNPFLGTATAVRYVADGGPLTFAWDVLAPVPLGALLVFIIATPADIPPFLRN
65 sample=26,          100.0%  50.7%    PVIPLLFFGYRIEGEINGHKFKIEGVGWGLPRLGFWVEYLKVTSGGPLKFSLDPLALVSLGLRVAVRPPPDIPDFVRD
66 sample=94,          100.0%  43.3%    PPLKPLLRFRSRITGSINGIKFEIDGAGVGLPLGLALWRYRVTKGAPLPFSLDVLAPVGLAALSVFTRYPDLPDFRRA
67 sample=77,          100.0%  44.2%    GPLGDRLFSLSYTKGSINGQKFARLAVGYGRPPEGFSVSVGGFFYGGPLKFSLYVLLLIPFAAGLVFAAAPPDIPHVLRD
68 sample=64,          100.0%  44.7%    APLGDPLGWVFYMTGDINGEKFAILGVGVGAPFAGLGVEYRRVTKGAPLKYDIYILTPFPFAGRLVFIRWPADIPPPLRL
69 sample=50,          100.0%  42.4%    DPLKPFQFGVFKLEGEINGHKFSIDGVGAGFPYLGLAVYVAYVAGGPLPFSIYVLPGLLAPLLVFAKYPDDIPNFVKL
70 sample=37,          100.0%  43.8%    SPVKPFLPFLEVGAGDLNGQKFVLVGAGAGLPFAGVGAEVRYVAFGAPLKFDINLLLLVPLPGLLPFIAWPPDIPDVLRA
71 sample=57,          100.0%  45.6%    SPVGPLLFSYYYGKGSINGKKFGIAGVGVGFPDLGWGVEYLYMTDGAPLDFAPEVLLFVPFCARLVFTRWPPDIPDYLKA
72 sample=80,          100.0%  47.9%    SVLGFVLAFYYYLSGDINGQKFRLLGAGVGLPFLGIGAAVRYVIENGPLTFSIDTLTLIPLPALLVFAKYPDIPDFTKA
73 sample=38,          100.0%  43.3%    SVLKSVQLGVFDLEGDINGHKFRIEGVFVGLPDKGILGAVYRRVAEGGPLPFSHIYVLLPIPFTANLVFTDYPDDIPDALKA
74 sample=20,          100.0%  44.2%    SPIKPEMPFVLKARGDVNGHKFALVGEGYGYPDKGEGKVDWRCAEGCPLPFSLDILLPFPFAAYGVFEWPDDLPNFLKD
75 sample=79,          100.0%  46.1%    KPIKPLLPYVRYIKGAVNGHPFAIVGVGIGNPDKGKVESYNRFVAGGPLPFSIDILVPVPLAGLGVFIKYPDTIPNTFKD
76 sample=34,          100.0%  40.6%    GVVKDFMKYLLYMYGDFNGHPFAIVGVGVGWPDKGLSAGVYRVAAGAPLPFSIDVILLSPFASLSVFTKYPPDIPPYVKN
77 sample=18,          100.0%  41.9%    APVKLVGGYVTVMVGTIVNGHPFAEGAGVGLPYLGLSVEVRYLGGGPLPFNIYILALNPFGGGGVFIKTPPDIANFLIA
78 sample=54,          100.0%  43.8%    DPIPPFLWSVYYITGEVDGIKFAILGVGRGKPYEGKSVSVEVRYSNHVVAGAPLGFSIDVLTPIGLAANSVFASRPPDIPDFIRD
79 sample=58,          100.0%  41.9%    DVIQPVLPFVFYGAGDVNGIKFAILGVGVGNGPFPFKGWAVEVRRAVVAGGPLPFSIALLLPIPFAALSIFIKYPEDIPNFVRE
80 sample=52,          100.0%  42.4%    KPIGPWMGFLELTYGSINGHDFLIARAGAGKPDEGVSYGVSAVIAGGPLPFDYSILIGFASRSVFAKFPADIPDFFKA
81 sample=7,           100.0%  41.9%    GVLKKFMPFVFLQGGDINGAKFLMVGVGAGFPFEGKTYGVRYVVAGGPLPFSFDVVAPIGLISRLVFTKYPKDIPNPFHA
82 sample=98,          100.0%  40.6%    SPLKPVMPFEIVGVGNGWPFEGKAFSYNRVIDGGPLKFSIDIRPIGLGGLVFAKVPEDIPDFVRA
83 sample=99,          100.0%  46.1%    PVLPDFLPYLGVTDGDINGHKFKILEAAGFPYRGELVSVRYRRVVAGGPLPFSLYILAPVPFYANGVFIAYPPDIPNFRRA
84 sample=42,          100.0%  45.6%    KVLKEVMKFVSFTVGTIGNGQPFALVGAGIGKPDKGETVSYNRVIFGGPLTFSIDTLALFPFAANSVFITEYPDTIAPYLKA
85 sample=56,          100.0%  43.8%    PPLGPFLPYVLLRTGDINGQPFAILGVGAGVPEEGWGLEYTAVVAGGPLTFSFDIIAPVPLAPSLVFITKWPPDIPNFVRA
86 sample=44,          100.0%  45.2%    GPVKKPMWYVKFQTGDIDGHPFAIVGVGYGNPFKGKSRSYDHVVLGGPLPFSPDVLAPFPLPALMVFIIYPKDIPDFLRA
87 sample=78,          100.0%  41.0%    PVVPEKLLSLSVSVRAGFVNGQPFLIVGVGYGNPFKGEYRSYNHVVAGAPLGFSIDVLTPIGLAANSVFASRPPDIPDFIRD
88 sample=17,          100.0%  45.6%    APLGLLLLVVYYLAGSINGHPFAAVEAGAGLPSLGVYAAVRVVAGAPLPFSIDPLLLVPLGGLSVFARWPPDIPHYVRA
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#		cov	pid	
89	sample=73,	100.0%	43.3%	DVLKPFQVFVAYYRGLINGHPFAAVAVGAGFPYLGLSVRYVRMLAGGPLPFSIYIFSLIPLVAEGVLTRYPPDFPDPRRE
90	sample=74,	100.0%	43.8%	GVLKPKLKYKYYLLKGNVNGQKFKIKGVGYGYPFKGERYSYNRVVAGAPLKFDIWILVPLPLGPFSVFIKYPEDIPNYLKA
91	sample=61,	100.0%	41.0%	GLLPPVMFFVGYQTGAVNGHWYSRLSVGVGFPDFGGYAAVNYVTSGAPLPASIDIFLLDPFAASSVFIIKYGPDQKNFLKD
92	sample=91,	100.0%	38.2%	PVLKDDLPYKLDIYGINGHDFAIKGEGTGSVAKGTGTGKLKVTGGGPLKYAIEPLLPFPLVFLGVMIRYTPDQPPFLRA
93	sample=39,	100.0%	37.8%	SPLGPFGLFVSLSAGTVNGQPFVRLGVGAGFPDLGFGFSVEAVVFGAPLTFSPYPLLIGSFGSRSVFFSWPKDIPNPLKA
94	sample=5,	100.0%	42.4%	SVLQPNLKYEEYMKGSINGHPFRIKGKSEGNPDKGELKAYRVVAGGPLPFSWDILLPISLPGRAVFVKWPADIPNFYKL
95	sample=41,	100.0%	43.3%	SVLKDFNVYVEVLAGTVNGHYFGFAGVGAGNPDKGVAVRYRRLVAGGPLKFDYSILDPVPFAGNGVFITYPPDIPNFLKD
96	sample=2,	100.0%	38.7%	DYLGDKLYQKEYTGGAINGHPFALAAVGYGNPNKGYFYRYRRVVFGGPLPFSLELLLPIPFAANSVFIKVPDDIPDYVKD
97	sample=19,	100.0%	42.9%	PPLKPFLPFVYYIRGNINGHDFEIFGYGAGFPFFGYAVARFRCVKGCPLPFNIDLLTLVPFAALGVFITRWPPDIPNFLKD
98	sample=67,	100.0%	42.4%	DPIKDKMFFVEYQTGFINGHPFNRVGVGYGNPNKGELEGYSRVTGGGPLPFDIYILLPFGPLAGSLVFAEWPEDIPPFIKA
99	sample=1,	100.0%	41.5%	PYIKPKMKYYWFGTGNINGHPFAIVGAGYGNPFKGELKELNRVIYGGGPLPFNLDVLALSPLIGRSVFTAFPEDIPDFIKN
100	sample=16,	100.0%	43.8%	SYLKPLMPFVLYMVGNINGYDFAIAGVGVGFPFKGFLAWYRRVIFGGPLPFSVDILAPAPLGISGVFIAFPEDIPDFIKA
101	sample=63,	100.0%	43.8%	KPLPPLLPFVEYTGGDINGKFATLGVGVGWPDKGVYAAYRRVVFGAPLPASPDILLPIPFGPLLVFIAYPPDIPNVFKG
	consensus/100%			..l..........G.hpG..a...t...h.s..G.........h.ssPl.ht...........hh..s.s....h..
	consensus/90%			.sl..h..hh.h.GtlNGp.F.hhusGhG.P...G...hth.hhh.GuPL.Fsh.hlh.hshss..VhsthP.DLP..h+.
	consensus/80%			sslt.hh.hl.hhhGslNGp.FthhGsGhG.P.hGh.hth.hlhhGuPL.Fsh.lLh.hshsu..VFstaPsDIPshl+s
	consensus/70%			ssltshh.al.hhtGslNGc.FshhGsGsGhP.hGhhhthptVlhGuPLsFulplLh.hPhuuhuVFstaPsDIPsal+s

		cov	pid	81 . 1 . . : 160
1	sample=62,	100.0%	100.0%	ALPEGFEGEATLKCEDGGVVTTRNRTRLVGGVLLIEDYIKASGFPADGPVMIKKLDGWEPVTLHASAADGVLTLIATLKL
2	sample=3,	100.0%	42.9%	ALPVGYYGAAVYRFDDGFTLKTLEYITSLVGGVLVGLSYVHGWNKPDGPGLIKTLTGWEPMTWKVRPALGRLVAEADIKA
3	sample=46,	100.0%	42.4%	ALPLGGWGVSYFDFEDGGKVRGAGYYTLVAGVLVTLNYVHGSGFPPDGPIMNKKTKGINPVTFDVRPLLGLLLAEATISL
4	sample=89,	100.0%	45.6%	ALPVGRMVVKFADGGTLKVREYTALVAGVLVYVGVVHGSNFPADGPIMKKLVGYAPVRLRLRPEGGLLRLGAEITF
5	sample=100,	100.0%	50.2%	AFPEGLWELATADFSDGGRVVSAGYARLLGGVLSASYVHGSGFPADGPVMIKKLTGWEPVTLRLRPAAGVLVVEATVTF
6	sample=31,	100.0%	42.4%	ALPVGGWYYSKLEFEDGGKVDSWGYIRLVGGVLVDLGYIKGSNFPEDGPFVAKKFDGILPVEVEFSPEGGALVGKATIEF
7	sample=75,	100.0%	43.3%	ALPEGAFTVSYFKYEDGGNIYSAGYIRLVGGFLLIVNYVVGENFKPDGPVMKKTLDGILPATLDVFPFLGALVAKGTLKF
8	sample=9,	100.0%	49.8%	ALPLGFYSEYKYDDGGKVETEGYTRLVGGVLVNLGYVKGSDPADGPVATKSLAGLEPVTLHAYPADGDLVIKAKISF
9	sample=12,	100.0%	46.1%	ALPPGAWSLGEMKFEDGGKVAYVAYVGGGVLVSATYIKGSGFPAGGPIMTKKLTGLEPVTLDGHAADGALHFTADLAF
10	sample=88,	100.0%	41.9%	ALPDGGYGLSYSYYEDGGYIYTAEVAWLADGVLYGAGYIHGGNFPKDGPVMIKKLTGIEPITLDAQPWLGALRFKSTITY
11	sample=97,	100.0%	44.7%	ALPYGVWGYGTTKFEDGGTVDUTEYTTLINGVLYGLGNVKGSNFPKDGPVMIKKLTGIEPVTLDCYPEDGALYADATLTY
12	sample=23,	100.0%	41.0%	AFPLGFTYASVTYYEDGGVQVTVGYATLVGGNIVFLTAVGSFFPKDGPFMKKGTGLKPATLDVFPFLGGLWFTATITL
13	sample=70,	100.0%	40.6%	ALPLGFVEASLLYFEDGGTLLSVSVYIDLVGGVLVSADYVVGRNFPPDGPIMKLTDGYNPFRLHVFPLLGLLGAVAKITL
14	sample=59,	100.0%	43.3%	AMPRGSFGTGTTKYEDGGTQKNASYTTLVGGVLLTLNYIDGSNFPKDGPIMITKTLGWKPVTFDLSPAGGALKAKATASI
15	sample=76,	100.0%	42.9%	ALPEGAWGVGVSFGQDGGVIVSAAYLRLAGGVLLGLIYVDGWNFPKDGPVMTIKKTAGWGPVTWTLWPALGFLVGAATTSI
16	sample=60,	100.0%	41.9%	AMPLGWFEVSRADYEDGGKLVTLSYTIGLVGGVVVTVGYVYGSGFPADGPFMIRGLQGPLPATWDVYPAGGALKAEGTVDF
17	sample=15,	100.0%	45.2%	ALPLGFWEVSRAKFDDGGTMLTASYATLYGGVLVSVNLVYGSGFPGVMIKRLDGLAPTTFHAAPRDGALTLIATLTF
18	sample=8,	100.0%	42.9%	ALPLGLWGASVTYYEDGGVTVSVGYTRLVGGVLVYLGYIYGSNFPEDGPVMKKLTGIDPYEPLVLPVAGLVLVRSTIEL
19	sample=92,	100.0%	43.8%	ALPLGFFGVGVFKFDDGGKLVVYEYTTLVGGVLIVVYDRGWNFPEDSPIMTKKLAGFEPVTLDVRPAGGLLVATAKISL
20	sample=35,	100.0%	46.1%	ALPLGFFGVGYRHFSDGGTVVSVSYSALVGGVLVILGYVRGSNFPKGGPFMIKKLKGWLPATYDVFPLLGVLAALATLSG
21	sample=69,	100.0%	44.2%	ALPLGGLGAGVAKFDDGGLQVYVEVFGQVAGVLVSVNYIHGSGFPPNGPFMIKKTDGLKPIILDVRPEAGWLVAKATISY
22	sample=96,	100.0%	41.5%	ALPAGWVSVSEMKFEDGGGLKTVSVAWMVAGVVSVNTYIHGSNFPEDGPVMTRKLEGWEPITWDVYPEDGAVKAKATITG
23	sample=28,	100.0%	44.2%	ALPAGFVSLTAAYFDDGGVLFSLEYGGLVGGVGVSVGYIDGWGFPADSPIPTKLRLRGWLPTTWYVSPVLGALAAVARETL
24	sample=48,	100.0%	43.3%	AFPEGFFGAGLLLWDDGGVTLSAEYTRLVGGLLVIRLRVYGFGFPKDGPVWIKKTTGIKPISWRLYPALGFLCALATISV
25	sample=14,	100.0%	40.6%	AMPLGWWSASYARYEDGGYTLEVEYARVIGGVLVIAGYIYSSNFKPDGPFMTKSLDGLKPFTVDVSTKNGWLYASTLLTY
26	sample=10,	100.0%	42.9%	ALPGGFFGLSVAFFDDGGVVVTAEYAALVGGVLLIAVGVYGYNFGKDGPFMIKTLAGWGPTULDCYPFGGWLYAKAKLTV
27	sample=87,	100.0%	44.2%	AMPLGFAEASVLKFDDGGVLLSASPTVLLGGVLLIAQYVLGGGFPPDGPIATKLKLKGVKPFIVKARPWGGIVVGTATLSL
28	sample=83,	100.0%	44.2%	VMPEGWWGASVDRFDDGGRVRTYDYTTLAGGVLFSAGYVHGSGFPADSPIMKATTGWGPITYACRPFGGALLVDATVPL
29	sample=45,	100.0%	46.1%	AFPRGFVGASYLRFEDGGVLVTLEYATLVGGVLVIAVYALGSGFPPDGPILIKKLRGWEPLTLACRTAAGWLVATADLRL
30	sample=51,	100.0%	43.8%	AFPEGIFGVEVVFFDDGGVLVSADYATLAGGVLVTVGYVYGFGFPADGPILQKKLQGWEPFTAAMAPAGGALVARATLRL
31	sample=24,	100.0%	45.6%	CLPAGGFSVSYAYGEDGGKLYNAGYYALVNGVLLIANYVYGSNFPKDGPVMKKLAGWEPLDLRTWPLLGGVWADATVTL
32	sample=93,	100.0%	43.8%	ALPWGFWSASVTKFDDGGRVWTAEYTTLVGGVLTLVYDGSGFPADGAFLTKTTGLLPTIVRVFPLLGVLAGAARISF
33	sample=27,	100.0%	47.0%	ALPEGLWSASVLKFDDGGTVTYLEYVRLVGGVLTALYDGSGFPKDGPFMIKKLDGWEPATFDVSPSGGLVRLRATISY
34	sample=55,	100.0%	43.8%	ALPAGAAAASVTYFEDGGVVTIAGYTGLVGGVLVSADLVYGSGFPADGPIATKKLDGWEDAILRVRPEGGALVADATLTA
35	sample=53,	100.0%	45.2%	AMPEGLRSVSTAFFDDGGFLVEYERTRLKGGVLLSDGYVYGSGFPADGPIMIKGLDGFEPITILMYPAGGLLVGVATVSL
36	sample=68,	100.0%	42.4%	ALPEGFFGVSVYYFSDGGVVEVSYTSLKDGVLWSVGYVYGSNFPKDGPVMTIKKLAGIEPFTWDIYPVLGLLVRAATVTF
37	sample=86,	100.0%	39.2%	ALPLGFWEVSLYYFDDGTKLVTAGYTVLVGGVLVGAPFYLKSNIKGDGPIMTKTQGFEKFTAFVFPFLGALFLLSTITL
38	sample=29,	100.0%	43.8%	ALPPGFVGESTFDFEDGGKLYAVEYTRLVGGVLVGVGVAYGYGFPKDGPVWIKKCKGWLPTRWRVYPRDGRLRAEAKLEL
39	sample=11,	100.0%	44.2%	AFPLGLFSVGVARFEDGCVMVSASYAGGFAGVLVNLNYVYISNCPKDGPILTKKLKGLEDVTLAVSPAGGALLATADFTF
40	sample=66,	100.0%	49.3%	AFPDGFWGVAVVDFDDGGKVVSAGYTSLVGGVLVTANYIYGSDFPKDGPVMIKKLQGWEPIILDVSPVLGALFASATITA
41	sample=4,	100.0%	49.8%	ALPDGVWGVSYLKFEDGGNVTYSYLSLVLGVLVSVVYIDASGFPKDGPLTIKKLAGWNPVTLKVYPRDGVLWLEATISF
42	sample=40,	100.0%	44.2%	ALPKGLFGVADLDFDDGGKIKTASYTTMVGGVLFSVNYIDGSDFPEDGPVMIKKLKGIEPTULDVYPRGAVLVAEADITF
43	sample=82,	100.0%	44.2%	AFPLGFFSVAVTVFDDGGVTLSVEYAVLVGGVVLIALYFHGFGFPPDGPILIRLKGLADITADVFPYLGLLFARFTVTY
44	sample=43,	100.0%	42.9%	ALPKGFFGVSVAVGDDGGVLVSAEYASLKGGVLFVYIAHGWGFPKDGPVMIKKLTGIEPVDALVFPFLGALFRLAKVTF
45	sample=21,	100.0%	47.0%	ALPLGFFGVYSTSLTKFEDGGTLKTYDYARVALGILVIYVRLYGSDFPADGPIMIKKLDGVKPITWAVSPALGALVATATISG
46	sample=72,	100.0%	44.2%	ALPLGGVGAGVAKYEDGGWQVWLDYRRLVAGVLVAAGYVHGSGFPADGPIMTKKLDGWEPIDLDLSAADGGVRAKATVAL
47	sample=47,	100.0%	43.8%	AMPLGAWGVSVTFYEDGGVTVVVEYTRLVGGVLLIASYVYGFNPKDGPFMTIKKSAGWEPFTARCFPGLGFAWAVADISI
48	sample=30,	100.0%	44.2%	AFPEGFFEAGVRYYEDGGVVFTLSYATLKNGVLFIAGYVHGWGFPPDGPFMIKKLKGIEPVTWDGYPYKGAIVLKAKETF
49	sample=36,	100.0%	45.2%	SLPLGYVGVSVTYYADGGKTVVAEYARYIGGVLWIANYIDGSFPPTGPVMIKTLKGWAPVTLRGRPAGGGLLLAATLTA
50	sample=84,	100.0%	45.6%	ALPSGYWGVAVLRFEDGGVVNAGYIRLAGGVLIADLLLGTNFPPDGPIMITTKGFEPVTLDGWEPVTLRLRATITL
51	sample=85,	100.0%	44.7%	ALPLGSWGAGVVYFDDGGVFGVGYTTLKGGVLHIVNYVYGINFPPDGPIMIKKLKGWEPFTPELERLGGALRARATLTL
52	mRFP_SWISS_MODEL,	100.0%	34.1%	SFPEGFKWERVMNFEDGGVVTVTQDDSSLQDGEFIYKVKLRGTNFPSDGPVMQKKTMGWEASTERMYPEDGALKGEIKMRL
53	sample=6,	100.0%	41.5%	AMPEGFWYEGEYDFDDGCKIKTVGYTRLIDGALLDVDYIDGSNCPEDGPAMTKGLKGVGPVTWKVYPEGGVLKGEATISF
54	sample=13,	100.0%	42.4%	AMPVGFSETMTVDFDSGGRLEYEGYTSLSGGILLGVGRVDGSGFPEDGPLIMTIKKLAGIEPVTLKYRPVGGLLHYDAKITF
55	sample=90,	100.0%	42.4%	AFPEGFEGVSVVYYEDGGSVQLTYERTRLFGGVVLVRSYVVGSNYPSDGPTTLAGYKPFTWLLFPLLGALVGVAKMSI
56	sample=81,	100.0%	42.4%	ALPLGFVGVSVWKFSDGGVLKERSYATLAAGVLVYASYVDISNLDPNGPAMITKNLTGWQPMILDVRPALGAIVMTATVKL
57	sample=65,	100.0%	38.2%	ALPLGFVGVSVRYFSDGGLLLTAEYTTLVAGVLSALWYRGYFFPKDGPIMSKTLTGIDKVTALVYPAFGWLFSVYTINF
58	sample=49,	100.0%	41.9%	ALPEGFESEAEYKFEDGGTLTVKEKAKLVDGVLHSEVEVKGSGFPKDGPIAKQDLAGWEPIILDVKPEDGTLKFKATIKL
59	sample=25,	100.0%	44.2%	ALPLGAVGAWKVDFEDGGKVTGRERTALVGGVLTTKTLAGYGPFTAAAYPRDGMLYYDFLSA
60	sample=22,	100.0%	45.2%	ALPEGWRGETLKGEDGSRVTFEEETALRGGVVSVNLLDLKGTDFPPNGPVLQKQLAGWEPVDLDVWPEGGRLRIRATIRA
61	sample=33,	100.0%	41.9%	ALPVGFLEEGVMKWEDGTIKYEGYSTLVAGVLVTLVDLKGSGFKPTSPIWTKKLAGWLPFTADVAPVGGVLTARFTIASA
62	sample=95,	100.0%	39.6%	ALPEGWKSKGYAKGDDGFEIKVDEKTTSYENGVINIESDVKGSGAKPDGPIMTGFKGWEKITWDVYPEDGKLKMKTTISL
63	sample=32,	100.0%	46.1%	ALPEGFRGESWAKWEDGGTVTSREEVSLKDGVLTIDTDKGSGFPKDGPVMKLKGVNPIALVSPGGGVLTSATVSV
64	sample=71,	100.0%	43.3%	SLPDGASFSASVAKWEDGGTVTSLWLLLGVLTLNSLKGSGFPKDGPIMTKLKGWTLATWDVFSPVGGVLTSATVSV
65	sample=26,	100.0%	50.7%	AFPAGFYSESTLKFEDGGTVKUTNKSRLVGGVVIEDKVDGSNFPADGVTKKLAGLKPIILHMYARDGALHLDANIEF
66	sample=94,	100.0%	43.3%	ALPEGLGGEAEMKFEDGGTLKVKERATLEGGVLVIESDVDGGDFPGDGPFMTKLVGVEPATLDVRPRDGAVVYYDAKLTY
67	sample=77,	100.0%	44.2%	ALPDGFEAEGTFKFDDGGVLKYKEKTRLVAGVLVTLNDVKGSGFPADGPIMTGDLTGIEEYTAEASPEDGTLKFKVKLDF
68	sample=64,	100.0%	44.7%	ALPEGSSKTTRKFEDGGTTIADERTTLAAGVLTVEGEIKGSNIPKDGPIATLKKLDGWEPSPEGGALRAKRTETF
69	sample=50,	100.0%	42.4%	ALPEGTTGEEKLDFEDGGVTIRKYKLSLENGVVKTEGEIKGDGFPEDGPILIKKLKGIKPFTLKLYPKDGKLYAEGTIEL
70	sample=37,	100.0%	43.8%	ALPLGVGAGYFKYEDGGNIFYVEYTTLVNGVLVTASYIHGSGFPKDGPFMIKTTKGLEEVTWRMSPWLGTVVLKAKVKF
71	sample=57,	100.0%	45.6%	ALPLGSRSRGTAKFDDGGELKTKTYTRLVGGVLVSRGYVDGSGFPKDGPVMTKKLAGVEPITWQVSPEGGAVLYKAKVTL
72	sample=80,	100.0%	47.9%	ALPLGGSGETVFEFEDGGKVTIKERYSLVDGVLKIEVDYKGSNFPKDGPIMIKKGIKPVTWKAYPKDGKLVLEATVTY
73	sample=38,	100.0%	43.3%	ALPLGSGETTIKFEDGGTVTEELRMWGSVLVSKGDVKGSNFPADGPVMTKLDGWEPVTPEGGDIKAKAKITF
74	sample=20,	100.0%	44.2%	ALPVGIKSESTTIKYDDGGTQVSKERARLEDGVLVTELDIKGSGFPADGPVYSHRLAGIEPFTIDVYPEDGVLKYHGTITY
75	sample=79,	100.0%	46.1%	AFPEGLKSESKTVFDDGGELKTEERARLKNGILYIEGKVDGSNFPADGPVMTKKLGIEPVTLDFWPEDGKLVGKAKVTY
76	sample=34,	100.0%	40.6%	SMPEGYWSTALLNYEDGGKVYEREYTRLKDGVLLSALYLHGENFPEDGPIMTNGLDGYDDTTFKVSPVGGLEKYTATITI

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 77 sample=18,      100.0%  41.9%  AAPPGFWSLSYQKYDDGFHQYTAEYSRLVAGLTALLIYGDGAKPDGPILTKKVDEIEPVTWDVSPRNGLLYARAKVSF
 78 sample=54,      100.0%  43.8%  ALPVGLTGAAYYKYSDGFKVYELEYSSLVAGFLFQVLYIKGDNYKPDGPIMTCKLTGILPTTFLVYPFGGMIALRAKVKF
 79 sample=58,      100.0%  41.9%  AFPLGLVEVGYAKFEDGGYIVYAGYASLWNGVLLIANYIYGKNFPKDGPWMNNGLKGWLPITLDVYPTFGLVAAKYTAEL
 80 sample=52,      100.0%  42.4%  AFPAGLFGGTYKFEDGGTLNYVEYSSLVGGLVVSVNYVKGSGFPKDGPVMTKKLDGIEETTWDVRYEGGVLVAEGKVSF
 81 sample=7,       100.0%  41.9%  ALPPGIFSVGLIKFEDGGYKTLEYGALVNGVMYYIKGSNFPKDGPVMQKKFDGYKPVILDVYTEGGFVVLEGTFEL
 82 sample=98,      100.0%  40.6%  ALPLGYYEESEIKYEDGGTIKNKGYTTLVGGVVVNVDDIDGGNFPADNPFMQKKTDGWDPFILDVSYEDGTVVLKGTITA
 83 sample=99,      100.0%  46.1%  ALPAGGYARGTAKFEDGGVIEYEEYLTLVDGVLVYYGRIKGSNFPKDGPIWTKKLRGWEPVTWDMSAEDGKLKAKGTAKL
 84 sample=42,      100.0%  45.6%  ALPKGFWAYSRMKFEDGGTCDSYTYTRLVGGVLVIANYIYCSNFPANGPVLIKKLKGWFTLDASPKDGALTVNATIPF
 85 sample=56,      100.0%  43.8%  ALPLGFTYASTAKFDDGGVVDTTGYTALVAGVLVSADYIKGYGFPAGGPVWAGTLDGIEPVDLEAGPDGGDWTLKGTVTF
 86 sample=44,      100.0%  45.2%  CFPGFGYGEAVTKWDDGGVKGVEYAWLKGGVLLSATYIDGSNFPADGPVLGKTLAGWEPFTLDASEVDGALELKGTLTA
 87 sample=78,      100.0%  41.0%  SFPGGLAGYLYTDYSDGGKVHEVEVTTLVGGVVVSASYVYGSDFPADGPVMGKILTGWAPVILDCYPFAGVLACDATWTL
 88 sample=17,      100.0%  45.6%  ALPLCGFESTSEMKFEGGGTLKKSEEYVGYFAGVLVIASRVKGSGFPKDGPILSKLKGLEGFSLKCSPADGALKCEATIVF
 89 sample=73,      100.0%  43.3%  ALPLGGYGEMELQFSDGGLLKVREYYSKVAGVIVILNYVKGSNFKPDGPIASKKLKGYAPFTLRVSAADGVLTAIGTITF
 90 sample=74,      100.0%  43.8%  CLPKGGWSLSVFYFSDGGVLITVEYYYYKGGKLRILGVVYGFNFPKDGPIMTKTLDGWDVTLKASARFGFLWLEDTIKG
 91 sample=61,      100.0%  41.0%  ALGLGYWSVSVLYFDDGGVLVTAEWITTLVGGVVLIASYSYGSNFPADGPFMSNRTTGLAPTTWDVYPAFGVVLATGTITF
 92 sample=91,      100.0%  38.2%  SLPEGFFGASYLGWDDGGKLLGLEYGRLEDGVLKCKLYVYGDGFPADGPVATKKLKGWEPTRWDVYTAGGLVWLRADISA
 93 sample=39,      100.0%  37.8%  AMPLGSFSVSYTKYDDGGNMFGLSYSALVGGVVVDVDYIYGKNFPADGPIMTKRLTGWLPKKWYCYPFLGMVWAKATLSF
 94 sample=5,       100.0%  42.4%  ALPKGIESEGYYDFEDGGKVKTKSKASLKNGTLKIVNYFDGSDFPADGPFLAKKVDGIEPVSLEVRPEDGKMVMEAELSF
 95 sample=41,      100.0%  43.3%  ALPFGWKETGTYDFEDGGKCKYASYTAYVGGVLVNVGYVYCSDFPKDGPIYTKKLKGWEPATIEVFPEGGKVKGKAKLKA
 96 sample=2,       100.0%  38.7%  ALPKGFFAVSYAKYEDGGTLVSVSYAYLKDGVLWSVNYVYGSNFKADSPGFIKKLTGWEPFDAKVFPFGGFLAMRTKITG
 97 sample=19,      100.0%  42.9%  ALPLGLLGAAYLLFDDGGTLYVLEYASLVAGVLLIGYVYGSNFPKDGPVMTCKTKGWEPMNLLVAPFLGAPVVYGTISL
 98 sample=67,      100.0%  42.4%  TMPEGFFGVGVLKFEDGCYVVTLRYGRLVDGVLVVVNYVYGSNCPETGPIMTYKLAGIKPATLEVYPWPGLLVLKATISF
 99 sample=1,       100.0%  41.5%  SFPEGTEGVSVTKYDDGGTLKEAEYTRLKDGVLVTLSYVYGSNFPGDGPIMTKKLAGIEEVTPKVSPENGTLTIDTKVTF
100 sample=16,      100.0%  43.8%  ALPLGFTSTATYKYADGGTLTETEYGKLVGGMLWGTLYVNGSNFPPDGPVMKKQLQGWEPLTLDVYTKDGKLVMDYDAVF
101 sample=63,      100.0%  43.8%  AMPLGWYEEMTLDFEDGGKVTGSYAAYVGGVLVITVYVNGSNFPKDGPIMSKDTQGVGPTNLKAYPFGGAVVFEGTISF
    consensus/100%                 shs.G........htsG........G.h.........h..ss.h.tt...t....p..h....G......p..h
    consensus/90%                  uhP.Ghht.shh.apDGuhhh.hthsthhsGllh.h..h.G.sF..DGPhhs+phtGh.shshth.s..Ghlhh.sphph
    consensus/80%                  AhP.Ghhu.uhhha-DGGhlh.hthstLhsGVlh.hshl.GpsFP.DGPlhoQkphtGhtPhThcs.P..Ghlhhpuplph
    consensus/70%                  AhP.Ghhuhuhhpa-DGGhlhshpYspLhuGVLl.hsYlhGosFPtDGPlhiTKcLpGhcPhUhcshPhsGhLhhpusloh
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                          cov    pid 161         .         .         .       2        ] 217
  1 sample=62,      100.0% 100.0%  NLQDGGVYTCDLTVRLKPLHPVPLPPAHCVELQRRILWRSPDGTWVAGAWTARAYHC
  2 sample=3,       100.0%  42.9%  KTADGSTFIAKQLEYLQPYVPVPLPPDFVVEERLTILAQTADGNFFVTARVARARPL
  3 sample=46,      100.0%  45.6%  NLEDGSTYSAKVTTLLLLPTRPVPVPLPPFRIDYSTKIIAYNPDYDRVFVAEITAVASRP
  4 sample=89,      100.0%  45.6%  HLADGGTYTARVRVELRPLRPVPLPPPAVLELEIRIIARNEDGTVVVTARRARVRPA
  5 sample=100,     100.0%  50.2%  NTKDGGTVIARLTAVLRPVRPVPLPPEAVADLSLRLLASNPDGTLWAQGFRLTVRRP
  6 sample=31,      100.0%  42.4%  KLKDGGTYKAKVETVFKPLPVPLPPKFVLKERIRLIWHDDDYNNYGAFRYMKAYPA
  7 sample=75,      100.0%  43.3%  KLKDGSEYTADTVLVVKPLRPAPLPPAHKIDIKIELIAGDRDYNNTGYRITAKASPK
  8 sample=9,       100.0%  49.8%  KKADGGTYIVDSEMRLRPFRPVPLPPPFAIRLELRLTGHTPDYSFWGLWVRRAEAGPA
  9 sample=12,      100.0%  46.1%  KVADGSTYRAKARVRAVPFRPVPLPAPFQVNVDITLIAHTADYSVWALARKAVASRP
 10 sample=88,      100.0%  41.9%  KTEDGSTYKAKSYTWARPWRPVPLPPAFRIDMTIDITGHTPDYTVFTVRGRATARPA
 11 sample=97,      100.0%  44.7%  KLKDGTTYTADLDLYIKPVPLPPAFRIDYTLELIDSDENENFFTFKFTAKATPA
 12 sample=23,      100.0%  41.0%  DLKDGGEYKGYFVAYAKPWWPVPLPPAMRLDVDLRLTASTPDGTAFVLARRMRAGPG
 13 sample=70,      100.0%  40.6%  KLKDGSTYSALQVTLVYPLRPVPLPPDFVVEERELKITGRNADETDVTLSRTARALPG
 14 sample=59,      100.0%  43.3%  GLKDGGTYDADVDITFKPLYPATLPEAAVAVASRTLIAHTADGTAFALVRRAEVRPR
 15 sample=76,      100.0%  42.9%  NLEDGGTYTWNTVVARPFRPVPLPPAPFRVDEDLRLIYQDEDGSLSAFLRRAVARPL
 16 sample=60,      100.0%  41.9%  RLKDGSTLSADVDIVVTPFWPVPLPGAFKATVNYKVIAHNPDYTNVWTARTCTAAPA
 17 sample=15,      100.0%  45.2%  NDKDGGTVTADVDRVLTPARPVPLPPPFVIKTQLKIIGHNPDYTWVAYSRNAEVSPA
 18 sample=8,       100.0%  42.9%  NVEDGSKYKGRAVTLERPFRPVPLPRPYRIAVEIRLTGSNPNGDWFTFARRSRARPL
 19 sample=92,      100.0%  43.8%  KLKDGSTYIADYLELIGPFIPALPPPHVVEVELELTGTNADGSFYRTRRRARARPA
 20 sample=35,      100.0%  46.1%  NLKDGGTYIADALYLLRAFRPVPLPPHRVDVTVTLTGQTPDGTFFAVAVHMRARPA
 21 sample=69,      100.0%  44.2%  NLKDGGTYIADFREVIKPLWPVPLPPAFVVDLEIKRIGHSDDGTWYALARRARARPA
 22 sample=96,      100.0%  41.5%  KLKDGSTYKADVEEVLKPFIPVPLPGPYKVDLKIEVLGSDEDGNNVVGAHLTAGPA
 23 sample=28,      100.0%  44.2%  KTADGGTVSALTVLLLRPLLPVPLPPPHVVDVDRRIIAKTPDENVAALAERATARPA
 24 sample=48,      100.0%  43.3%  NLEDGGVLTAKATTLLIKPVPAVIDSEIKIVGKTADGSVFAVEWNAEARPL
 25 sample=14,      100.0%  40.6%  NLKDGTTYTADVLLAIKPYRPVPLPPKFVIDVDIKRIFRTPDDSITAYLRRMVARPG
 26 sample=10,      100.0%  42.9%  NTKDGSKVTAYQVVALKPFKPVPLPGAFQIKLDLKLVGYTPDYTFFVYERSMTAGPK
 27 sample=87,      100.0%  44.2%  ETEDGGTYIAALVVALVPLWPVPLPGPFEVDASVTLTGSSADGSKFTYLRKAVARPA
 28 sample=83,      100.0%  44.2%  NLKDGGTYIARRREYLKPFKPVPLPPAFEIDVDLRRIGHTPDGTFFFLAERATARPA
 29 sample=45,      100.0%  46.1%  PLPDGSTYRARLTLVLRPLPAPLPPAPLVNVDTTPDDSVLAFLFRRAVARPA
 30 sample=51,      100.0%  43.8%  KLADGTTYTADAFLLIKPIRPVPLPGPFVLDVEIRVIWSDPDGTWVAVYRRMRVRAA
 31 sample=24,      100.0%  45.6%  GLKDGGTYKFYLRQYLRPFVPTPLPPAHLIEADITLLWQDADGNVFAFAGRARARPA
 32 sample=93,      100.0%  43.8%  KTKDGSTVSGDTLTLVKPWRPVPLPGPYEVDLQINITGQTPDGTWFNQLRKARARPA
 33 sample=27,      100.0%  47.0%  KLKDGSTVNAKAYQRVYPFRPVPLPPKPLKIDVSTRILWHNDDDTWFLTASRARASRA
 34 sample=55,      100.0%  43.8%  KLKDGSKYKARRRTVIRPLRPVPLPAPHCIDVKTKIIGHNPDGDWFLVYRQATARPC
 35 sample=53,      100.0%  45.2%  KKKDGTTYKFLLLQVIEPYRPVPLPPAHALNTTVKIFASNPDRDWFATVRWAKASPL
 36 sample=68,      100.0%  42.4%  NTKDGTTYPALVLQVIIPGKPVPLPPPAVLDVKRTIVAKNPDDTVVATLRVATVRPA
 37 sample=86,      100.0%  39.2%  KTKDGTTYIAKRVDLIRPFRPVKLPGPFKLHAKQKLVASTPDEDWFLEFGFAKLSKP
 38 sample=29,      100.0%  43.8%  KLADGGTYIADLDLTPFAPAPLPGPYVIDGQLTLLFHTPDFSVFGTFFTFAARPA
 39 sample=11,      100.0%  44.2%  NLEDGGTYKATVTLLIIPLFPVPLPGAFTIHLSIKLTWHTPDYTLFGYARWARAAPA
 40 sample=66,      100.0%  49.3%  KTKDGGTYSGKLYMLVIPGRPVPLPPAFKCTLTITITASTPDYSFIGLARITARCSAA
 41 sample=4,       100.0%  49.8%  NLTDGGTYTADMVTRLIPKRPVPLPPAYEVTLDITLTGSTPDGTWLSLSYKATAGPA
 42 sample=40,      100.0%  44.2%  KDEDGGTYSAKFKSVLYPFTKPPLPGPYKVNVSLKIIGSTADGTVFGTLRKATAERA
 43 sample=82,      100.0%  42.4%  NTEDGGTLTAKHVQAIRPFRPVPLPPHVVHIKIDILGKDPDGNWVVYSRKATASHK
 44 sample=43,      100.0%  42.9%  KNEDGGTYIYYVAEYIRPITPVPLPPPFLVEQLTLTGSDADGNEFFLERTERARRV
 45 sample=21,      100.0%  47.0%  ALKDGSTYKADVTLLIKPLTPVPLPPAFVVDETITLTWGDPDYTKFGTFRVRASAP
 46 sample=72,      100.0%  44.2%  KLKDGSTLKADVYLYLRAYRPVALPPSRVHLDLKLIAHTPPYNWFASAWRADAGPA
 47 sample=47,      100.0%  43.8%  KLKDGSTYKARRVVRLRAFRPVPLAPPHLIEAEIKLIASTPDGNVFAEFWYARARPA
 48 sample=30,      100.0%  44.2%  KLEDGSTYPSYTYVYIKPYKPVKLPPKFTVNEKTTLVATTPDGTVFATVRRMTATKS
 49 sample=36,      100.0%  45.2%  NLEDGGTYPAVALWWLRPLRPVPLPPAFVVDVTIELTWHTPDTIKFGYRRKATVSPL
 50 sample=84,      100.0%  45.6%  KLEDGGTYTADYLALVVPTIPVPLPPPYVLDVKIELIFSTPDGTLFGTRVEARАPR
 51 sample=85,      100.0%  44.7%  KLEDGGTYSARVLTYLRPFRPVPLPPHVVDLKLLWHTPDYDAWGTYRHLYARA
 52 mRFP_SWISS_MODEL, 100.0% 34.1% KLKDGGHVYDAEVKTTYMAKKPVQLPGAYKTDIKLDTSHNEDYTIVEQYERAEGRHS
 53 sample=6,       100.0%  41.5%  NLADGSTLSAKAKLTIKPLRPVPLPGAFEVDEDLTLIGHNPDTIFLVAKVTRTARPA
 54 sample=13,      100.0%  42.4%  KLKDGGTLTADVNILVKPSVPVPLPPAFLIDLKLTLIAHTPDYNFLALAVKAEARPG
 55 sample=90,      100.0%  42.4%  NLTDGSEYSGGLWLLVLKPLRPVPLGPPYLLKSKITRIGGNADRTVWAAEFRYMEGSPA
 56 sample=81,      100.0%  44.2%  NTKDGGTYIADMTLVVRLKPLRPVPLGPPHVVHLDTKIAKNKDEIFVVYSRYARASPA
 57 sample=65,      100.0%  38.2%  KKKDGTTYPAVVYRAIKPLPVPLPPAHVVDFELKITDHTEDYTKFKYERKMVARRA
 58 sample=49,      100.0%  41.9%  KVKDGSTLIADVNITVKPLKPVPLPPAHKINVTISIIDHNKDYTLKFKLAKKATAEAA
 59 sample=25,      100.0%  44.2%  KTKDGGTYSAKASLRLKPLRPVPLPPAFTVDADIKILWHDDDYSSYGEIAVMTAKPA
 60 sample=22,      100.0%  45.2%  RTKDGGTYTPDLDIRVEPYRPVPLPPPHRLDLRLELIASTPDGDWTVSAWEARARPA
 61 sample=33,      100.0%  41.9%  KLEDGGTVDADTEIVGRPLIPALPPAFTLKVEIRLIATHPDYTWFGYLYRGVAGPA
 62 sample=95,      100.0%  39.6%  KTSDGGTYKFKTDIDIEPYRPVPLPPPYKITSYYKLVFHDPDYNKFGYLRWAVASRK
 63 sample=32,      100.0%  46.1%  KTKDGGISAAVAVARPLRPVRLPPAFVIDYQRTIVGRDDNDNTIWVAARAAXRPA
 64 sample=71,      100.0%  44.2%  NTKDGSTVSFDVDYLLYPFRGVPLPPPHVVTVQLDITGRTADDTVVTLSLRARAAPA
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 65 sample=26,      100.0%  50.7%  NLEDGTTLTADYILTVKPYRPVPLPPPALIDLRIKVIWHTPDGTEVALLRWAVARPA
 66 sample=94,      100.0%  43.3%  KLDDGSTYIADYIERVRAARPVPPPPPHVIHERIRLLATDADGSDFTLWREMRAGPA
 67 sample=77,      100.0%  44.2%  TLKDGTKYSADMDITLKPAKPVPLPPACKITVDTRLLATDPDGNVFAVARRAKMSRA
 68 sample=64,      100.0%  44.7%  KLDDGSTYSADVDITVTPAIPVPLPPAHRVDVTVKIFGHTKDGTDIYTAWRAVAGPA
 69 sample=50,      100.0%  42.4%  NTEDGSTYKAKMELVITPKKNVPLPPEFELKVEIKLLGSTPDGDFFVAYRNATAGPA
 70 sample=37,      100.0%  43.8%  NTTDGSKVYADALIVVKPLRPVPLPPPAVITVKRTLTGYTPDYSVWGGTFTAVASPG
 71 sample=57,      100.0%  45.6%  KTEDGGKYIADVTITCKPLRPVPLPPPHVIEEQTKLVGHDEDYNHMVVAFRAEARPA
 72 sample=80,      100.0%  47.9%  DTEDGSEYKAKVKITITPAVPVPLPPEFCIDFNLKITAHNEDFTWFSTAWKFEAHPC
 73 sample=38,      100.0%  43.3%  KLADGGTYIADADIRLKPYVPVPLPPEFKIDVEIKLTFHTPDYIVFGVFWKAKAHKK
 74 sample=20,      100.0%  44.2%  KLEDGGSYIGFDLRVEPYRPVALPPAAKIDVSIKITDQDPDGNGFSYEWKAKAYPG
 75 sample=79,      100.0%  46.1%  NLEDGTKYIGDSTSVVEPLKPVPLPPAFKIDLKIEIIGGDEDYNNFKTRREAEARPK
 76 sample=34,      100.0%  40.6%  KKKDGSTYKVDLNILVKPTKPVPLGPPYVIETKTTLVASTPDYSWFAYKRQAVAKHA
 77 sample=18,      100.0%  41.9%  KLKDGGTISADVRIVFRPLRPVPLPPPHKIFARLKLIASNPDGSITAYFRYAAAFPA
 78 sample=54,      100.0%  43.8%  GLKDGGTYVADVLIYVRPLVPVPLPPPHKIEVELKITGSTPDNNVFAYERKGRALPL
 79 sample=58,      100.0%  41.9%  KKDDGGTKADVYILIYPLKPVPLPGKFCIKRKIEIIGKNEKGDWFAVKVEQEAYPC
 80 sample=52,      100.0%  42.4%  KLKDGGTYDADAVLRLTPLRPVPLPGPFKLTEKIEVTFKNPDGTLVGYKREAVAEPL
 81 sample=7,       100.0%  41.9%  NLKDGSTYKADVKIYGYPFKPVPLPPKHKINVNLKVIGKDEDGTFVVIEEEMSASRV
 82 sample=98,      100.0%  40.6%  KLKDGGTYKAKLTIKLTPLKPVPLPGPFKLTVNLTKTWSDKDGNNFGTTLEMTASKA
 83 sample=99,      100.0%  46.1%  KTEDGTLYTADEELELKPLIPAPLPGPHRIETATELIGHNEDFDKFALRRRARAVPA
 84 sample=42,      100.0%  45.6%  KLEDGGSYKADVEMVITPFEPVPLPGPFKIDVNIELIGSDPLGNNFALKRYAKASPA
 85 sample=56,      100.0%  43.8%  KLKDGGTYIADVDLRVRPLVPVPLPPAHLIKAELKRIGSDPNDNHRALYFKAEAVPA
 86 sample=44,      100.0%  45.2%  KLKDGGTYTADFYMRVRPFRPVPLPPPHKIEEKITRTWSSPDGDHIWTEREAKASPK
 87 sample=78,      100.0%  41.0%  GLTDGSTYIADVKVLIWPFVPVPIPPPFKVDITITLDWSTPDYSRFGQKATMKASPK
 88 sample=17,      100.0%  45.6%  NKEDGGKYKAKLTGTLKALRPVPLPPAFVVDVDIKLIARDADDTVYAYAATAVARRG
 89 sample=73,      100.0%  43.3%  HTEDGGTYEAKLRIREKPLRDVPLPPDYVVEDIKLTYSDPDITNWLYTRYSRAVPL
 90 sample=74,      100.0%  43.8%  NKKDGSTYIAKAVGLLKCFHPAPLPPDHCIDRSIKEIWSDKDGTKFAIYEKREARPC
 91 sample=61,      100.0%  41.0%  NLSDGGTIIGDMLIVLYPYKPVPLPDRHVIDTKTTLTGSTSDGIFYAYTRTMVARPA
 92 sample=91,      100.0%  38.2%  KLEDGGTYKARALIVVRPLRPVPLPAPGVIDTQITLTSKDADGIDFAFSYHAVARPG
 93 sample=39,      100.0%  37.8%  KLEDGGTYKAKVLIAIKPLWPVPLPPEFVCDVELKVIGHTPDDTVIVRFWKAKCSKG
 94 sample=5,       100.0%  42.4%  KLEDGGTYKCNARITIDTKHPVPLPPAHVVDLKLETVWSNPDETNVKYRRTAAARPG
 95 sample=41,      100.0%  43.3%  KTEDGGTYSVDADLDIQPYKNVPLPPAMVVDLKIERLWSNDNKDNVVTKRTAAARKL
 96 sample=2,       100.0%  38.7%  KLADGGTYKADVYILLKPFTPVKLPPAYLIKGELKTLWSDKDGNDFAYYYKAEAKPL
 97 sample=19,      100.0%  42.9%  KLEDGGTLKANLLGVLIPLVPVPLPGPHLIKTEIKITGSKPNFEDFTIERTSVAGPL
 98 sample=67,      100.0%  42.4%  NLKDGSEYKADYVEVIRPYRPVPLPPKAKLDLEITLTFSTPDQTLVGWKMKAKASAA
 99 sample=1,       100.0%  41.5%  KTEDGGTYIADAKYTIKPKKKVELPPAFKIVLEIKTTFQTPDGIFWGLERKMKAEKA
100 sample=16,      100.0%  43.8%  KLKDGGTYPADVTLTIKPSYPVPLPGAFTIDVDLKLTAQSPDGNDVGYFRRAVAKKK
101 sample=63,      100.0%  43.8%  KLKDGGTLKADAKIVLKPLIPNVPLPPEFTIDVQDTILWQDKDGNNFGYARKAKAHRT
    consensus/100%                 ...DGs.h........s...s..s....h....p....p...p.........h...
    consensus/90%                  phtDGsphps.h..hhhPhhPVPLPP.hhlp.phphhhps.D.s.hhh.h.h.st.h
    consensus/80%                  phcDGuThpuch.hhlpPhhPVPLPPssahlchplplhhpss.D.s.hshhhphtAt.t
    consensus/70%                  phcDGulYpAchhhhlpPh+PVPLPPsahlchplclhspssDhshhshhtpupApPs
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