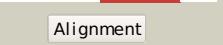
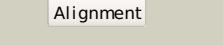
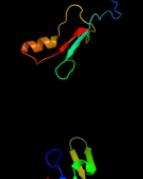
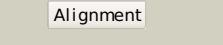
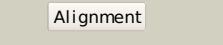
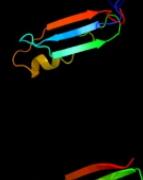
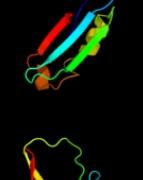
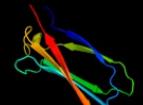
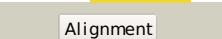
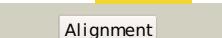
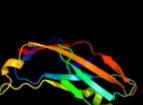
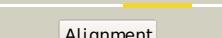
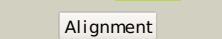
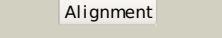
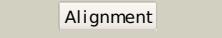


Phyre²

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Date	Thu Jan 5 12:16:10 GMT 2012
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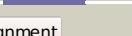
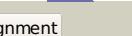
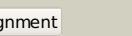
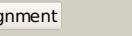
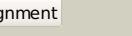
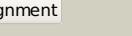
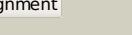
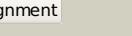
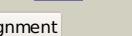
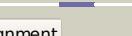
Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c3c12A_			100.0	30	PDB header: biosynthetic protein Chain: A: PDB Molecule: flagellar protein; PDBTitle: crystal structure of flgd from xanthomonas campestris:2 insights into the hook capping essential for flagellar3 assembly
2	c3osvcC_			100.0	29	PDB header: structural protein Chain: C: PDB Molecule: flagellar basal-body rod modification protein flgd; PDBTitle: the crytsal structure of flgd from p. aeruginosa
3	c1xf1A_			96.5	27	PDB header: hydrolase Chain: A: PDB Molecule: c5a peptidase; PDBTitle: structure of c5a peptidase- a key virulence factor from streptococcus
4	c3d33B_			95.3	24	PDB header: unknown function Chain: B: PDB Molecule: domain of unknown function with an immunoglobulin-like PDBTitle: crystal structure of a duf3244 family protein with an immunoglobulin-2 like beta-sandwich fold (bvu_0276) from bacteroides vulgatus atcc3 8482 at 1.70 a resolution
5	c2p9rA_			93.2	18	PDB header: signaling protein Chain: A: PDB Molecule: alpha-2-macroglobulin; PDBTitle: human alpha2-macroglogulin is composed of multiple domains,2 as predicted by homology with complement component c3
6	c3isyA_			91.6	15	PDB header: protein binding Chain: A: PDB Molecule: intracellular proteinase inhibitor; PDBTitle: crystal structure of an intracellular proteinase inhibitor (ipi_2 bsu11130) from bacillus subtilis at 2.61 a resolution
7	c3payB_			89.7	16	PDB header: cell adhesion Chain: B: PDB Molecule: putative adhesin; PDBTitle: crystal structure of a putative adhesin (bacova_04077) from bacteroides ovatus at 2.50 a resolution
8	c3gf8A_			89.2	25	PDB header: carbohydrate binding protein Chain: A: PDB Molecule: putative polysaccharide binding proteins (duf1812); PDBTitle: crystal structure of putative polysaccharide binding proteins2 (duf1812) (np_809975.1) from bacteroides thetaiotomicron vpi-5482 at 2.20 a resolution
9	d2c9qa1			85.7	17	Fold: Immunoglobulin-like beta-sandwich Superfamily: E set domains Family: Copper resistance protein C (CopC, PcoC)
10	c3sd2A_			85.5	23	PDB header: unknown function Chain: A: PDB Molecule: putative member of duf3244 protein family; PDBTitle: crystal structure of a putative member of duf3244 protein family2 (bt_3571) from bacteroides thetaiotomicron vpi-5482 at 1.40 a3 resolution
11	d1lx2a_			83.6	20	Fold: Immunoglobulin-like beta-sandwich Superfamily: E set domains Family: Copper resistance protein C (CopC, PcoC)

12	c3pe9D_			82.9	15	PDB header: unknown function Chain: D: PDB Molecule: fibronectin(iii)-like module; PDBTitle: structures of clostridium thermocellum cbha fibronectin(iii)-like2 modules
13	c2wxwxB_			82.1	15	PDB header: chitin-binding protein Chain: B: PDB Molecule: glcnac-binding protein a; PDBTitle: vibrio cholerae colonization factor gbpA crystal structure
14	c2pn5A_			81.2	19	PDB header: immune system Chain: A: PDB Molecule: thioester-containing protein i; PDBTitle: crystal structure of tepr
15	d1nqja_			80.4	12	Fold: CUB-like Superfamily: Collagen-binding domain Family: Collagen-binding domain
16	c3cu7A_			79.7	9	PDB header: immune system Chain: A: PDB Molecule: complement c5; PDBTitle: human complement component 5
17	c3pdgA_			77.8	15	PDB header: unknown function Chain: A: PDB Molecule: fibronectin(iii)-like module; PDBTitle: structures of clostridium thermocellum cbha fibronectin(iii)-like2 modules
18	c3irpX_			76.9	30	PDB header: cell adhesion Chain: X: PDB Molecule: uro-adherence factor a; PDBTitle: crystal structure of functional region of uafa from staphylococcus saprophyticus at 1.50 angstrom resolution
19	c3pe9B_			75.6	13	PDB header: unknown function Chain: B: PDB Molecule: fibronectin(iii)-like module; PDBTitle: structures of clostridium thermocellum cbha fibronectin(iii)-like2 modules
20	c3jqxA_			74.0	17	PDB header: cell adhesion Chain: A: PDB Molecule: colh protein; PDBTitle: crystal structure of clostridium histolyticum colh collagenase2 collagen binding domain 3 at 2.2 angstrom resolution in the presence of calcium and cadmium
21	d1cwva3		not modelled	68.5	14	Fold: Immunoglobulin-like beta-sandwich Superfamily: Invasin/intimin cell-adhesion fragments Family: Invasin/intimin cell-adhesion fragments
22	d2d7na1		not modelled	66.2	12	Fold: Immunoglobulin-like beta-sandwich Superfamily: E set domains Family: Filamin repeat (rod domain)
23	c2k7pA_		not modelled	65.3	12	PDB header: structural protein Chain: A: PDB Molecule: filamin-a; PDBTitle: filamin a ig-like domains 16-17
24	c3pe9A_		not modelled	59.3	23	PDB header: unknown function Chain: A: PDB Molecule: fibronectin(iii)-like module; PDBTitle: structures of clostridium thermocellum cbha fibronectin(iii)-like2 modules
25	d1cwva1		not modelled	53.3	17	Fold: Immunoglobulin-like beta-sandwich Superfamily: Invasin/intimin cell-adhesion fragments Family: Invasin/intimin cell-adhesion fragments
26	c3mn8A_		not modelled	49.1	16	PDB header: hydrolase Chain: A: PDB Molecule: p15968p; PDBTitle: structure of drosophila melanogaster carboxypeptidase d isoform 1b2 short
27	c3ohnA_		not modelled	46.3	15	PDB header: membrane protein Chain: A: PDB Molecule: outer membrane usher protein fimb; PDBTitle: crystal structure of the fimb translocation domain
28	c1uywA_		not modelled	46.2	16	PDB header: hydrolase Chain: A: PDB Molecule: carboxypeptidase m; PDBTitle: crystal structure of human carboxypeptidase m
29	d2d7pa1		not modelled	44.1	21	Fold: Immunoglobulin-like beta-sandwich Superfamily: E set domains

						Family: Filamin repeat (rod domain)
30	c2nsmA	Alignment	not modelled	43.5	18	PDB header: hydrolase Chain: A: PDB Molecule: carboxypeptidase n catalytic chain; PDBTitle: crystal structure of the human carboxypeptidase n (kininase i)2 catalytic domain
31	c2b39B	Alignment	not modelled	39.7	14	PDB header: immune system Chain: B: PDB Molecule: c3; PDBTitle: structure of mammalian c3 with an intact thioester at 3a resolution
32	d1zdxal	Alignment	not modelled	39.4	43	Fold: FimD N-terminal domain-like Superfamily: FimD N-terminal domain-like Family: Usher N-domain
33	d2q4ma1	Alignment	not modelled	38.1	20	Fold: Tubby C-terminal domain-like Superfamily: Tubby C-terminal domain-like Family: At5g01750-like
34	c1zxuA	Alignment	not modelled	38.1	20	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: at5g01750 protein; PDBTitle: x-ray structure of protein from arabidopsis thaliana2 at5g01750
35	d1nqjb	Alignment	not modelled	37.2	13	Fold: CUB-like Superfamily: Collagen-binding domain Family: Collagen-binding domain
36	d2e9ia1	Alignment	not modelled	37.2	15	Fold: Immunoglobulin-like beta-sandwich Superfamily: E set domains Family: Filamin repeat (rod domain)
37	c2x5pA	Alignment	not modelled	37.0	18	PDB header: protein binding Chain: A: PDB Molecule: fibronectin binding protein; PDBTitle: crystal structure of the streptococcus pyogenes fibronectin binding2 protein fbab-b
38	c2k7qa	Alignment	not modelled	36.9	14	PDB header: structural protein Chain: A: PDB Molecule: filamin-a; PDBTitle: filamin a ig-like domains 18-19
39	c3mkqA	Alignment	not modelled	35.4	12	PDB header: transport protein Chain: A: PDB Molecule: coatomer beta'-subunit; PDBTitle: crystal structure of yeast alpha/beta prime-cop subcomplex of the copi2 vesicular coat
40	d1zdva1	Alignment	not modelled	35.0	43	Fold: FimD N-terminal domain-like Superfamily: FimD N-terminal domain-like Family: Usher N-domain
41	d2diaa1	Alignment	not modelled	33.5	20	Fold: Immunoglobulin-like beta-sandwich Superfamily: E set domains Family: Filamin repeat (rod domain)
42	c2kutA	Alignment	not modelled	32.0	16	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: solution structure of gmr58a from geobacter metallireducens.2 northeast structural genomics consortium target gmr58a
43	d1bf2a1	Alignment	not modelled	31.7	13	Fold: Immunoglobulin-like beta-sandwich Superfamily: E set domains Family: E-set domains of sugar-utilizing enzymes
44	c3pe9C	Alignment	not modelled	30.8	11	PDB header: unknown function Chain: C: PDB Molecule: fibronectin(iii)-like module; PDBTitle: structures of clostridium thermocellum cbha fibronectin(iii)-like2 modules
45	c210da	Alignment	not modelled	30.1	18	PDB header: cell adhesion Chain: A: PDB Molecule: cell surface protein; PDBTitle: solution nmr structure of putative cell surface protein ma_4588 (272-2 376 domain) from methanosaerica acetivorans, northeast structural3 genomics consortium target mvr254a
46	c3dsmA	Alignment	not modelled	29.7	7	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein bacuni_02894; PDBTitle: crystal structure of the surface layer protein bacuni_02894 from2 bacteroides uniformis, northeast structural genomics consortium3 target btr193d.
47	d1uwyal	Alignment	not modelled	28.9	14	Fold: Prealbumin-like Superfamily: Carboxypeptidase regulatory domain-like Family: Carboxypeptidase regulatory domain
48	d1nkgal	Alignment	not modelled	27.8	20	Fold: Prealbumin-like Superfamily: Starch-binding domain-like Family: Rhamnogalacturonase B, RhgB, middle domain
49	d2hc5a1	Alignment	not modelled	27.5	17	Fold: Flag-like Superfamily: Flag-like Family: Flag-like
50	d1clca2	Alignment	not modelled	27.4	20	Fold: Immunoglobulin-like beta-sandwich Superfamily: E set domains Family: E-set domains of sugar-utilizing enzymes
51	c3kpta	Alignment	not modelled	27.1	15	PDB header: cell adhesion Chain: A: PDB Molecule: collagen adhesion protein; PDBTitle: crystal structure of bcpa, the major pilin subunit of2 bacillus cereus
52	c2jojA	Alignment	not modelled	26.8	25	PDB header: cell cycle Chain: A: PDB Molecule: centrin protein; PDBTitle: nmr solution structure of n-terminal domain of euplates2 octocarinatus centrin
53	d1l0qa1	Alignment	not modelled	26.8	17	Fold: Immunoglobulin-like beta-sandwich Superfamily: PKD domain Family: PKD domain
54	c2e7mA	Alignment	not modelled	26.3	14	PDB header: structural protein Chain: A: PDB Molecule: protein kiaa0319; PDBTitle: solution structure of the pkd domain (329-428) from human2 kiaa0319
						PDB header: carboxypeptidase Chain: A: PDB Molecule: carboxypeptidase qp180 residues 503-

55	c1h8IA	Alignment	not modelled	26.2	20	882; PDBTitle: duck carboxypeptidase d domain ii in complex with gmsa
56	d2dj4a1	Alignment	not modelled	25.8	23	Fold: Immunoglobulin-like beta-sandwich Superfamily: E set domains Family: Filamin repeat (rod domain)
57	d2d7ma1	Alignment	not modelled	25.3	19	Fold: Immunoglobulin-like beta-sandwich Superfamily: E set domains Family: Filamin repeat (rod domain)
58	d1v05a	Alignment	not modelled	25.2	17	Fold: Immunoglobulin-like beta-sandwich Superfamily: E set domains Family: Filamin repeat (rod domain)
59	d2vzsa3	Alignment	not modelled	24.5	9	Fold: Immunoglobulin-like beta-sandwich Superfamily: beta-Galactosidase/glucuronidase domain Family: beta-Galactosidase/glucuronidase domain
60	c2pz4A	Alignment	not modelled	23.9	19	PDB header: cell adhesion Chain: A: PDB Molecule: protein gbs052; PDBTitle: crystal structure of spab (gbs52), the minor pilin in gram-positive2 pathogen streptococcus agalactiae
61	c2kzwA	Alignment	not modelled	23.5	22	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: solution nmr structure of q8psa4 from methanoscarcina mazei, northeast2 structural genomics consortium target mar143a
62	d1edqa1	Alignment	not modelled	23.1	15	Fold: Immunoglobulin-like beta-sandwich Superfamily: E set domains Family: E-set domains of sugar-utilizing enzymes
63	d1b77a2	Alignment	not modelled	22.1	23	Fold: DNA clamp Superfamily: DNA clamp Family: DNA polymerase processivity factor
64	c3hrza	Alignment	not modelled	21.8	12	PDB header: immune system Chain: A: PDB Molecule: cobra venom factor; PDBTitle: cobra venom factor (cvf) in complex with human factor b
65	d2dmab1	Alignment	not modelled	20.3	27	Fold: Immunoglobulin-like beta-sandwich Superfamily: E set domains Family: Filamin repeat (rod domain)
66	d2dmca1	Alignment	not modelled	20.3	12	Fold: Immunoglobulin-like beta-sandwich Superfamily: E set domains Family: Filamin repeat (rod domain)
67	d2ag4a1	Alignment	not modelled	19.9	27	Fold: Ganglioside M2 (gm2) activator Superfamily: Ganglioside M2 (gm2) activator Family: Ganglioside M2 (gm2) activator
68	d2di8a1	Alignment	not modelled	19.6	17	Fold: Immunoglobulin-like beta-sandwich Superfamily: E set domains Family: Filamin repeat (rod domain)
69	c2qkiA	Alignment	not modelled	19.3	17	PDB header: immune system/hydrolase inhibitor Chain: A: PDB Molecule: complement c3; PDBTitle: human c3c in complex with the inhibitor compstatin
70	c3pddA	Alignment	not modelled	19.3	18	PDB header: unknown function Chain: A: PDB Molecule: glycoside hydrolase, family 9; PDBTitle: structures of clostridium thermocellum cbha fibronectin(iii)-like2 modules
71	d1cwva2	Alignment	not modelled	17.6	18	Fold: Immunoglobulin-like beta-sandwich Superfamily: Invasin/intimin cell-adhesion fragments Family: Invasin/intimin cell-adhesion fragments
72	c3b9eA	Alignment	not modelled	17.1	16	PDB header: hydrolase Chain: A: PDB Molecule: chitinase a; PDBTitle: crystal structure of inactive mutant e315m chitinase a from2 vibrio harveyi
73	d2j3sa2	Alignment	not modelled	16.6	19	Fold: Immunoglobulin-like beta-sandwich Superfamily: E set domains Family: Filamin repeat (rod domain)
74	d2w0pa1	Alignment	not modelled	16.4	15	Fold: Immunoglobulin-like beta-sandwich Superfamily: E set domains Family: Filamin repeat (rod domain)
75	c3ottB	Alignment	not modelled	16.1	10	PDB header: transcription Chain: B: PDB Molecule: two-component system sensor histidine kinase; PDBTitle: crystal structure of the extracellular domain of the putative one2 component system bt4673 from b. theta iotaomicron
76	d1l0qa2	Alignment	not modelled	15.9	16	Fold: 7-bladed beta-propeller Superfamily: YVTN repeat-like/Quinoprotein amine dehydrogenase Family: YVTN repeat
77	d1h8la1	Alignment	not modelled	15.7	20	Fold: Prealbumin-like Superfamily: Carboxypeptidase regulatory domain-like Family: Carboxypeptidase regulatory domain
78	d2hq2a1	Alignment	not modelled	15.6	17	Fold: Heme iron utilization protein-like Superfamily: Heme iron utilization protein-like Family: HemS/ChuS-like
79	d1uwfa1	Alignment	not modelled	15.0	17	Fold: Common fold of diphtheria toxin/transcription factors/cytochrome f Superfamily: Bacterial adhesins Family: Pilus subunits
80	d1wlga	Alignment	not modelled	14.4	13	Fold: Flagellar hook protein flgE Superfamily: Flagellar hook protein flgE Family: Flagellar hook protein flgE
81	c3cnkB	Alignment	not modelled	14.1	17	PDB header: structural protein Chain: B: PDB Molecule: filamin-a; PDBTitle: crystal structure of the dimerization domain of human2 filamin a PDB header: cell adhesion/transport/chaperone

82	c3rfzB		Alignment	not modelled	13.9	15	Chain: B: PDB Molecule: outer membrane usher protein, type 1 fimbrial synthesis; PDBTitle: crystal structure of the fimd usher bound to its cognate fimb:fimh2 substrate
83	c1qfhB		Alignment	not modelled	13.8	20	PDB header: actin binding protein Chain: B: PDB Molecule: protein (gelation factor); PDBTitle: dimerization of gelation factor from dictyostelium discoideum: crystal structure of rod domains 5 and 6
84	c3iswA		Alignment	not modelled	13.0	16	PDB header: structural protein Chain: A: PDB Molecule: filamin-a; PDBTitle: crystal structure of filamin-a immunoglobulin-like repeat 21 bound to2 an n-terminal peptide of cftr
85	c1ponB		Alignment	not modelled	12.9	13	PDB header: calcium-binding protein Chain: B: PDB Molecule: troponin c; PDBTitle: site iii-site iv troponin c heterodimer, nmr
86	c3rghA		Alignment	not modelled	12.6	21	PDB header: cell adhesion Chain: A: PDB Molecule: filamin-a; PDBTitle: structure of filamin a immunoglobulin-like repeat 10 from homo sapiens
87	d1ccda		Alignment	not modelled	12.2	11	Fold: Uteroglobin-like Superfamily: Uteroglobin-like Family: Uteroglobin-like
88	c2yh5A		Alignment	not modelled	12.0	11	PDB header: lipid binding protein Chain: A: PDB Molecule: dapx protein; PDBTitle: structure of the c-terminal domain of bamc
89	d1qfha2		Alignment	not modelled	11.9	18	Fold: Immunoglobulin-like beta-sandwich Superfamily: E set domains Family: Filamin repeat (rod domain)
90	d1pzsa		Alignment	not modelled	11.7	25	Fold: Immunoglobulin-like beta-sandwich Superfamily: Cu,Zn superoxide dismutase-like Family: Cu,Zn superoxide dismutase-like
91	c1pzsa		Alignment	not modelled	11.7	25	PDB header: oxidoreductase, metal binding protein Chain: A: PDB Molecule: superoxide dismutase [cu-zn]; PDBTitle: crystal structure of a cu-zn superoxide dismutase from mycobacterium 2 tuberculosis at 1.63 resolution
92	d3bwud1		Alignment	not modelled	11.5	40	Fold: FimD N-terminal domain-like Superfamily: FimD N-terminal domain-like Family: Usher N-domain
93	d1wpga2		Alignment	not modelled	11.4	31	Fold: HAD-like Superfamily: HAD-like Family: Meta-cation ATPase, catalytic domain P
94	d2cwza1		Alignment	not modelled	11.3	20	Fold: Thioesterase/thiol ester dehydrase-isomerase Superfamily: Thioesterase/thiol ester dehydrase-isomerase Family: TTHA0967-like
95	d1wgao		Alignment	not modelled	11.1	19	Fold: Immunoglobulin-like beta-sandwich Superfamily: PKD domain Family: PKD domain
96	c2qt7B		Alignment	not modelled	10.9	25	PDB header: hydrolase Chain: B: PDB Molecule: receptor-type tyrosine-protein phosphatase-like PDBTitle: crystallographic structure of the mature ectodomain of the2 human receptor-type protein-tyrosine phosphatase ia-2 at3 1.30 angstroms
97	c3gzka		Alignment	not modelled	10.9	10	PDB header: hydrolase Chain: A: PDB Molecule: cellulase; PDBTitle: structure of a. acidocaldarius cellulase cela
98	c2go2A		Alignment	not modelled	10.9	25	PDB header: protein binding Chain: A: PDB Molecule: kunitz-type serine protease inhibitor bbki; PDBTitle: crystal structure of bbki, a kunitz-type kallikrein inhibitor
99	c2kzxA		Alignment	not modelled	10.7	11	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: solution nmr structure of a3dht5 from clostridium thermocellum,2 northeast structural genomics consortium target cmr116