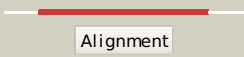

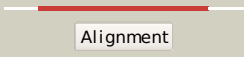

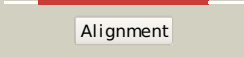

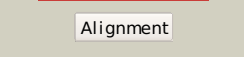
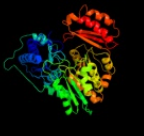
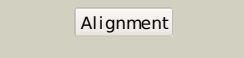

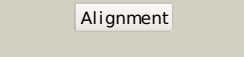

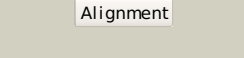

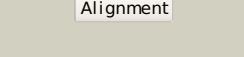



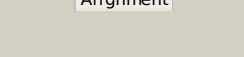

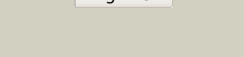



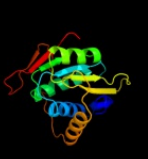

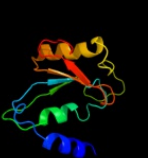
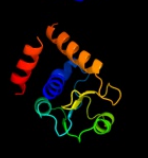





#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c1wqaB_	 Alignment		100.0	28	PDB header: isomerase Chain: B: PDB Molecule: phospho-sugar mutase; PDBTitle: crystal structure of pyrococcus horikoshii2 phosphomannomutase/phosphoglucomutase complexed with mg2+
2	c3c04A_	 Alignment		100.0	30	PDB header: isomerase Chain: A: PDB Molecule: phosphomannomutase/phosphoglucomutase; PDBTitle: crystal structure of the p368g mutant of pmm/pgm from p. aeruginosa
3	c2f71A_	 Alignment		100.0	24	PDB header: isomerase Chain: A: PDB Molecule: 455aa long hypothetical phospho-sugar mutase; PDBTitle: crystal structure of sulfolobus tokodaii2 phosphomannomutase/phosphoglucomutase
4	c3pdkB_	 Alignment		100.0	23	PDB header: isomerase Chain: B: PDB Molecule: phosphoglucosamine mutase; PDBTitle: crystal structure of phosphoglucosamine mutase from b. anthracis
5	c1tuoA_	 Alignment		100.0	24	PDB header: biosynthetic protein Chain: A: PDB Molecule: putative phosphomannomutase; PDBTitle: crystal structure of putative phosphomannomutase from2 thermus thermophilus hb8
6	c2fuvB_	 Alignment		100.0	20	PDB header: isomerase Chain: B: PDB Molecule: phosphoglucomutase; PDBTitle: phosphoglucomutase from salmonella typhimurium.
7	c1c4gB_	 Alignment		100.0	23	PDB header: transferase Chain: B: PDB Molecule: protein (alpha-d-glucose 1-phosphate PDBTitle: phosphoglucomutase vanadate based transition state analog2 complex
8	c3i3wB_	 Alignment		100.0	24	PDB header: isomerase Chain: B: PDB Molecule: phosphoglucosamine mutase; PDBTitle: structure of a phosphoglucosamine mutase from francisella tularensis
9	c1kfiA_	 Alignment		100.0	21	PDB header: isomerase Chain: A: PDB Molecule: phosphoglucomutase 1; PDBTitle: crystal structure of the exocytosis-sensitive2 phosphoprotein, pp63/parafusin (phosphoglucomutase) from3 paramecium
10	c2z0fA_	 Alignment		100.0	21	PDB header: isomerase Chain: A: PDB Molecule: putative phosphoglucomutase; PDBTitle: crystal structure of putative phosphoglucomutase from thermus2 thermophilus hb8
11	c2dkdA_	 Alignment		100.0	18	PDB header: isomerase Chain: A: PDB Molecule: phosphoacetylglucosamine mutase; PDBTitle: crystal structure of n-acetylglucosamine-phosphate mutase, 2 a member of the alpha-d-phosphohexomutase superfamily, in3 the product complex

12	d1p5dx1	Alignment		100.0	35	Fold: Phosphoglucumutase, first 3 domains Superfamily: Phosphoglucumutase, first 3 domains Family: Phosphoglucumutase, first 3 domains
13	d1kfia1	Alignment		100.0	19	Fold: Phosphoglucumutase, first 3 domains Superfamily: Phosphoglucumutase, first 3 domains Family: Phosphoglucumutase, first 3 domains
14	d3pmga1	Alignment		100.0	18	Fold: Phosphoglucumutase, first 3 domains Superfamily: Phosphoglucumutase, first 3 domains Family: Phosphoglucumutase, first 3 domains
15	d1p5dx3	Alignment		99.9	29	Fold: Phosphoglucumutase, first 3 domains Superfamily: Phosphoglucumutase, first 3 domains Family: Phosphoglucumutase, first 3 domains
16	d1p5dx2	Alignment		99.9	37	Fold: Phosphoglucumutase, first 3 domains Superfamily: Phosphoglucumutase, first 3 domains Family: Phosphoglucumutase, first 3 domains
17	d1kfia3	Alignment		99.9	20	Fold: Phosphoglucumutase, first 3 domains Superfamily: Phosphoglucumutase, first 3 domains Family: Phosphoglucumutase, first 3 domains
18	d3pmga3	Alignment		99.9	16	Fold: Phosphoglucumutase, first 3 domains Superfamily: Phosphoglucumutase, first 3 domains Family: Phosphoglucumutase, first 3 domains
19	d3pmga2	Alignment		99.8	31	Fold: Phosphoglucumutase, first 3 domains Superfamily: Phosphoglucumutase, first 3 domains Family: Phosphoglucumutase, first 3 domains
20	d1kfia2	Alignment		99.8	24	Fold: Phosphoglucumutase, first 3 domains Superfamily: Phosphoglucumutase, first 3 domains Family: Phosphoglucumutase, first 3 domains
21	d1p5dx4	Alignment	not modelled	99.8	17	Fold: TBP-like Superfamily: Phosphoglucumutase, C-terminal domain Family: Phosphoglucumutase, C-terminal domain
22	d1wjwa	Alignment	not modelled	99.2	16	Fold: TBP-like Superfamily: Phosphoglucumutase, C-terminal domain Family: Phosphoglucumutase, C-terminal domain
23	d1kfia4	Alignment	not modelled	97.5	20	Fold: TBP-like Superfamily: Phosphoglucumutase, C-terminal domain Family: Phosphoglucumutase, C-terminal domain
24	d3pmga4	Alignment	not modelled	97.5	23	Fold: TBP-like Superfamily: Phosphoglucumutase, C-terminal domain Family: Phosphoglucumutase, C-terminal domain
25	d1nn4a	Alignment	not modelled	91.7	33	Fold: Ribose/Galactose isomerase RpiB/AlsB Superfamily: Ribose/Galactose isomerase RpiB/AlsB Family: Ribose/Galactose isomerase RpiB/AlsB
26	c3he8A	Alignment	not modelled	91.6	32	PDB header: isomerase Chain: A: PDB Molecule: ribose-5-phosphate isomerase; PDBTitle: structural study of clostridium thermocellum ribose-5-phosphate2 isomerase b
27	c3k7pA	Alignment	not modelled	91.0	15	PDB header: isomerase Chain: A: PDB Molecule: ribose 5-phosphate isomerase; PDBTitle: structure of mutant of ribose 5-phosphate isomerase type b from2 trypanosoma cruzi.
28	c3m1pA	Alignment	not modelled	90.1	15	PDB header: isomerase Chain: A: PDB Molecule: ribose 5-phosphate isomerase; PDBTitle: structure of ribose 5-phosphate isomerase type b from trypanosoma2 cruzi, soaked with allose-6-phosphate
						Fold: Flavodoxin-like

29	d3bula2	Alignment	not modelled	90.1	19	Superfamily: Cobalamin (vitamin B12)-binding domain Family: Cobalamin (vitamin B12)-binding domain
30	c3s5pA	Alignment	not modelled	90.1	21	PDB header: isomerase Chain: A: PDB Molecule: ribose 5-phosphate isomerase; PDBTitle: crystal structure of ribose-5-phosphate isomerase b rpib from giardia2 lamblia
31	d2vvpa1	Alignment	not modelled	88.7	23	Fold: Ribose/Galactose isomerase RpiB/AlsB Superfamily: Ribose/Galactose isomerase RpiB/AlsB Family: Ribose/Galactose isomerase RpiB/AlsB
32	c2ppwA	Alignment	not modelled	84.9	20	PDB header: isomerase Chain: A: PDB Molecule: conserved domain protein; PDBTitle: the crystal structure of uncharacterized ribose 5-phosphate isomerase2 rpib from streptococcus pneumoniae
33	c1k98A	Alignment	not modelled	84.7	23	PDB header: transferase Chain: A: PDB Molecule: methionine synthase; PDBTitle: adomet complex of meth c-terminal fragment
34	d1ccwa	Alignment	not modelled	83.1	29	Fold: Flavodoxin-like Superfamily: Cobalamin (vitamin B12)-binding domain Family: Cobalamin (vitamin B12)-binding domain
35	d1olxa	Alignment	not modelled	78.5	23	Fold: Ribose/Galactose isomerase RpiB/AlsB Superfamily: Ribose/Galactose isomerase RpiB/AlsB Family: Ribose/Galactose isomerase RpiB/AlsB
36	c3c5yD	Alignment	not modelled	78.5	18	PDB header: isomerase Chain: D: PDB Molecule: ribose/galactose isomerase; PDBTitle: crystal structure of a putative ribose 5-phosphate isomerase2 (saro_3514) from novosphingobium aromaticivorans dsm at 1.81 a3 resolution
37	c1bmtB	Alignment	not modelled	77.7	18	PDB header: methyltransferase Chain: B: PDB Molecule: methionine synthase; PDBTitle: how a protein binds b12: a 3.0 angstrom x-ray structure of2 the b12-binding domains of methionine synthase
38	c2i2xD	Alignment	not modelled	72.8	19	PDB header: transferase Chain: D: PDB Molecule: methyltransferase 1; PDBTitle: crystal structure of methanol:cobalamin methyltransferase complex2 mtabc from methanosarcina barkeri
39	c3qayC	Alignment	not modelled	71.4	17	PDB header: lyase Chain: C: PDB Molecule: endolysin; PDBTitle: catalytic domain of cd27l endolysin targeting clostridia difficile
40	c3onoA	Alignment	not modelled	69.7	19	PDB header: isomerase Chain: A: PDB Molecule: ribose/galactose isomerase; PDBTitle: crystal structure of ribose-5-phosphate isomerase lacab rpib from2 vibrio parahaemolyticus
41	c3ezxA	Alignment	not modelled	69.1	10	PDB header: transferase Chain: A: PDB Molecule: monomethylamine corrinoid protein 1; PDBTitle: structure of methanosarcina barkeri monomethylamine2 corrinoid protein
42	c1y80A	Alignment	not modelled	69.1	24	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: predicted cobalamin binding protein; PDBTitle: structure of a corrinoid (factor iiim)-binding protein from2 moorella thermoacetica
43	c3hlyA	Alignment	not modelled	67.4	19	PDB header: flavoprotein Chain: A: PDB Molecule: flavodoxin-like domain; PDBTitle: crystal structure of the flavodoxin-like domain from2 synechococcus sp q5mzp6_synp6 protein. northeast structural3 genomics consortium target snr135d.
44	d1vmea1	Alignment	not modelled	64.6	14	Fold: Flavodoxin-like Superfamily: Flavoproteins Family: Flavodoxin-related
45	c3fniA	Alignment	not modelled	64.2	15	PDB header: oxidoreductase Chain: A: PDB Molecule: putative diflavin flavoprotein a 3; PDBTitle: crystal structure of a diflavin flavoprotein a3 (al13895) from nostoc2 sp., northeast structural genomics consortium target nsr431a
46	d1ycga1	Alignment	not modelled	60.9	21	Fold: Flavodoxin-like Superfamily: Flavoproteins Family: Flavodoxin-related
47	d1fmfa	Alignment	not modelled	59.4	32	Fold: Flavodoxin-like Superfamily: Cobalamin (vitamin B12)-binding domain Family: Cobalamin (vitamin B12)-binding domain
48	d1vr6a1	Alignment	not modelled	56.0	16	Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: Class I D4HP synthetase
49	d1e5da1	Alignment	not modelled	55.5	19	Fold: Flavodoxin-like Superfamily: Flavoproteins Family: Flavodoxin-related
50	c3qd5B	Alignment	not modelled	55.0	23	PDB header: isomerase Chain: B: PDB Molecule: putative ribose-5-phosphate isomerase; PDBTitle: crystal structure of a putative ribose-5-phosphate isomerase from2 coccidioides immitis solved by combined iodide ion sad and mr
51	d1xrsb1	Alignment	not modelled	51.4	18	Fold: Flavodoxin-like Superfamily: Cobalamin (vitamin B12)-binding domain Family: Cobalamin (vitamin B12)-binding domain
52	c3cinA	Alignment	not modelled	48.5	16	PDB header: isomerase Chain: A: PDB Molecule: myo-inositol-1-phosphate synthase-related protein; PDBTitle: crystal structure of a myo-inositol-1-phosphate synthase-related2 protein (tm_1419) from thermotoga maritima msb8 at 1.70 a resolution
53	d1gvfa	Alignment	not modelled	46.9	17	Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: Class II FBP aldolase
54	c3no8A	Alignment	not modelled	44.6	13	PDB header: hydrolase Chain: A: PDB Molecule: n-acetylmuramoyl-l-alanine amidase;

54	c3re6A	Alignment	not modelled	44.0	15	PDBTitle: the crystal structure of a domain from n-acetylmuramoyl-l-alanine2 amidase of bartonella henselae str. houston-1 PDB header: oxidoreductase
55	c2ohiB	Alignment	not modelled	44.0	15	Chain: B: PDB Molecule: type a flavoprotein fp4a; PDBTitle: crystal structure of coenzyme f420h2 oxidase (fp4a), a diiron2 flavoprotein, reduced state
56	c3nvtA	Alignment	not modelled	43.1	12	PDB header: transferase/isomerase Chain: A: PDB Molecule: 3-deoxy-d-arabino-heptulosonate 7-phosphate synthase; PDBTitle: 1.95 angstrom crystal structure of a bifunctional 3-deoxy-7-2 phosphoheptulonate synthase/chorismate mutase (aroa) from listeria3 monocytogenes egd-e
57	d1d9ea	Alignment	not modelled	40.8	10	Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: Class I DAHP synthetase
58	d1t71a	Alignment	not modelled	40.6	19	Fold: Metallo-dependent phosphatases Superfamily: Metallo-dependent phosphatases Family: DR1281-like
59	d1rvga	Alignment	not modelled	38.4	18	Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: Class II FBP aldolase
60	c2q9uB	Alignment	not modelled	37.8	17	PDB header: oxidoreductase Chain: B: PDB Molecule: a-type flavoprotein; PDBTitle: crystal structure of the flavodiiron protein from giardia2 intestinalis
61	c3k6qB	Alignment	not modelled	35.4	15	PDB header: ligand binding protein Chain: B: PDB Molecule: putative ligand binding protein; PDBTitle: crystal structure of an antitoxin part of a putative toxin/antitoxin2 system (swol_0700) from syntrophomonas wolfei subsp. wolfei at 1.80 a3 resolution
62	c2pfsA	Alignment	not modelled	35.2	15	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: universal stress protein; PDBTitle: crystal structure of universal stress protein from nitrosomonas2 europaea
63	d1vjza	Alignment	not modelled	35.2	17	Fold: TIM beta/alpha-barrel Superfamily: (Trans)glycosidases Family: beta-glycanases
64	c2rejA	Alignment	not modelled	34.7	10	PDB header: choline-binding protein Chain: A: PDB Molecule: putative glycine betaine abc transporter protein; PDBTitle: abc-transporter choline binding protein in unliganded semi-2 closed conformation
65	c1keeH	Alignment	not modelled	33.6	20	PDB header: ligase Chain: H: PDB Molecule: carbamoyl-phosphate synthetase small chain; PDBTitle: inactivation of the amidotransferase activity of carbamoyl phosphate2 synthetase by the antibiotic acivicin
66	d1b1ca	Alignment	not modelled	33.4	12	Fold: Flavodoxin-like Superfamily: Flavoproteins Family: Cytochrome p450 reductase N-terminal domain-like
67	d1ws6a1	Alignment	not modelled	31.4	17	Fold: S-adenosyl-L-methionine-dependent methyltransferases Superfamily: S-adenosyl-L-methionine-dependent methyltransferases Family: YhhF-like
68	c3f93D	Alignment	not modelled	31.4	19	PDB header: hydrolase Chain: D: PDB Molecule: beta-glucosidase; PDBTitle: crystal structure of exo-1,3/1,4-beta-glucanase (exop) from2 pseudoalteromonas sp. bb1
69	d1dxha2	Alignment	not modelled	29.9	18	Fold: ATC-like Superfamily: Aspartate/ornithine carbamoyltransferase Family: Aspartate/ornithine carbamoyltransferase
70	c2jpiA	Alignment	not modelled	29.9	13	PDB header: structural genomics Chain: A: PDB Molecule: hypothetical protein; PDBTitle: chemical shift assignments of pa4090 from pseudomonas2 aeruginosa
71	d2a51a1	Alignment	not modelled	28.7	13	Fold: Flavodoxin-like Superfamily: Flavoproteins Family: WrbA-like
72	c2vyoA	Alignment	not modelled	28.6	12	PDB header: hydrolase Chain: A: PDB Molecule: chitooligosaccharide deacetylase; PDBTitle: chitin deacetylase family member from encephalitozoon2 cuniculi
73	c3op1A	Alignment	not modelled	28.0	14	PDB header: transferase Chain: A: PDB Molecule: macrolide-efflux protein; PDBTitle: crystal structure of macrolide-efflux protein sp_1110 from2 streptococcus pneumoniae
74	c3qqzA	Alignment	not modelled	27.9	14	PDB header: metal binding protein Chain: A: PDB Molecule: putative uncharacterized protein yjik; PDBTitle: crystal structure of the c-terminal domain of the yjik protein from2 escherichia coli cft073
75	c3nolA	Alignment	not modelled	27.7	29	PDB header: transferase Chain: A: PDB Molecule: glutamine cyclotransferase; PDBTitle: crystal structure of zymomonas mobilis glutaminyl cyclase (trigonal2 form)
76	c2iswB	Alignment	not modelled	27.3	25	PDB header: lyase Chain: B: PDB Molecule: putative fructose-1,6-bisphosphate aldolase; PDBTitle: structure of giardia fructose-1,6-biphosphate aldolase in2 complex with phosphoglycolohydroxamate
77	c1xrsB	Alignment	not modelled	26.9	18	PDB header: isomerase Chain: B: PDB Molecule: d-lysine 5,6-aminomutase beta subunit; PDBTitle: crystal structure of lysine 5,6-aminomutase in complex with plp,2 cobalamin, and 5'-deoxyadenosine
78	c1vmeB	Alignment	not modelled	26.6	12	PDB header: electron transport Chain: B: PDB Molecule: flavoprotein; PDBTitle: crystal structure of flavoprotein (tm0755) from thermotoga maritima at2 1.80 a resolution
						PDB header: chaperone

79	c3s3tD_	Alignment	not modelled	25.6	8	Chain: D: PDB Molecule: nucleotide-binding protein, universal stress protein uspa PDBTitle: universal stress protein uspa from lactobacillus plantarum
80	c3sz8D_	Alignment	not modelled	25.5	14	PDB header: transferase Chain: D: PDB Molecule: 2-dehydro-3-deoxyphosphooctonate aldolase 2; PDBTitle: crystal structure of 2-dehydro-3-deoxyphosphooctonate aldolase from2 burkholderia pseudomallei
81	d1q77a_	Alignment	not modelled	23.9	9	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Adenine nucleotide alpha hydrolases-like Family: Universal stress protein-like
82	d2z3va1	Alignment	not modelled	22.6	15	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Adenine nucleotide alpha hydrolases-like Family: Universal stress protein-like
83	c3a9gA_	Alignment	not modelled	22.5	26	PDB header: oxidoreductase Chain: A: PDB Molecule: putative uncharacterized protein; PDBTitle: crystal structure of pqq-dependent sugar dehydrogenase apo-form
84	d7reqa2	Alignment	not modelled	21.9	16	Fold: Flavodoxin-like Superfamily: Cobalamin (vitamin B12)-binding domain Family: Cobalamin (vitamin B12)-binding domain
85	c1w17A_	Alignment	not modelled	21.8	13	PDB header: hydrolase Chain: A: PDB Molecule: probable polysaccharide deacetylase pdaa; PDBTitle: structure of bacillus subtilis pdaa, a family 42 carbohydrate esterase.
86	c3gxB_	Alignment	not modelled	21.4	21	PDB header: transcription Chain: B: PDB Molecule: transcription elongation factor spt6; PDBTitle: structure of the sh2 domain of the candida glabrata2 transcription elongation factor spt6, crystal form b
87	d1t6t1_	Alignment	not modelled	21.2	21	Fold: Toprim domain Superfamily: Toprim domain Family: Toprim domain
88	c2cliA_	Alignment	not modelled	21.1	15	PDB header: hydrolase Chain: A: PDB Molecule: peptidoglycan glcnac deacetylase; PDBTitle: structure of streptococcus pneumoniae peptidoglycan2 deacetylase (sppgda) d 275 n mutant.
89	d1xk7a1	Alignment	not modelled	20.9	38	Fold: CoA-transferase family III (CaiB/BaiF) Superfamily: CoA-transferase family III (CaiB/BaiF) Family: CoA-transferase family III (CaiB/BaiF)
90	d1p9oa_	Alignment	not modelled	20.2	10	Fold: Ribokinase-like Superfamily: CoaB-like Family: CoaB-like
91	c2zkiH_	Alignment	not modelled	20.2	20	PDB header: transcription Chain: H: PDB Molecule: 199aa long hypothetical trp repressor binding PDBTitle: crystal structure of hypothetical trp repressor binding2 protein from sul folobus tokodaii (st0872)
92	c2isma_	Alignment	not modelled	19.4	20	PDB header: sugar binding protein Chain: A: PDB Molecule: putative oxidoreductase; PDBTitle: crystal structure of the putative oxidoreductase (glucose2 dehydrogenase) (ttha0570) from thermus thermophilus hb8
93	d2clia1	Alignment	not modelled	19.2	15	Fold: 7-stranded beta/alpha barrel Superfamily: Glycoside hydrolase/deacetylase Family: NodB-like polysaccharide deacetylase
94	c2dumD_	Alignment	not modelled	18.4	7	PDB header: structural genomics, unknown function Chain: D: PDB Molecule: hypothetical protein ph0823; PDBTitle: crystal structure of hypothetical protein, ph0823
95	d1m40a_	Alignment	not modelled	18.4	21	Fold: beta-lactamase/transpeptidase-like Superfamily: beta-lactamase/transpeptidase-like Family: beta-Lactamase/D-ala carboxypeptidase
96	c3c52B_	Alignment	not modelled	18.2	17	PDB header: lyase Chain: B: PDB Molecule: fructose-bisphosphate aldolase; PDBTitle: class ii fructose-1,6-bisphosphate aldolase from2 helicobacter pylori in complex with3 phosphoglycolhydroxamic acid, a competitive inhibitor
97	c1vs1B_	Alignment	not modelled	18.2	19	PDB header: transferase Chain: B: PDB Molecule: 3-deoxy-7-phosphoheptulonate synthase; PDBTitle: crystal structure of 3-deoxy-d-arabino-heptulosonate-7-2 phosphate synthase (dahp synthase) from aeropyrum pernix3 in complex with mn2+ and pep
98	c3hzpA_	Alignment	not modelled	18.2	22	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: ntf2-like protein of unknown function; PDBTitle: crystal structure of ntf2-like protein of unknown function mn2a_05052 from prochlorococcus marinus (yp_291699.1) from prochlorococcus sp.3 nat2a at 1.40 a resolution
99	c1xa3B_	Alignment	not modelled	18.0	38	PDB header: transferase Chain: B: PDB Molecule: crotonobetainyl-coa:carnitine coa-transferase; PDBTitle: crystal structure of caib, a type iii coa transferase in2 carnitine metabolism