
























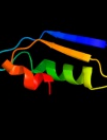







Phyre2

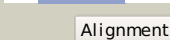

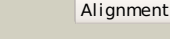
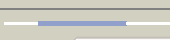

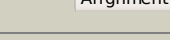
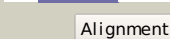


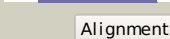

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Description	P0AB52
Date	Thu Jan 5 11:14:39 GMT 2012
Unique Job ID	a97cc3fa37726b60

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d1jx7a_	 Alignment		100.0	98	Fold: DsrEFH-like Superfamily: DsrEFH-like Family: DsrEF-like
2	d2hy5a1	 Alignment		100.0	22	Fold: DsrEFH-like Superfamily: DsrEFH-like Family: DsrEF-like
3	d2d1pa1	 Alignment		100.0	24	Fold: DsrEFH-like Superfamily: DsrEFH-like Family: DsrEF-like
4	d2hy5b1	 Alignment		100.0	23	Fold: DsrEFH-like Superfamily: DsrEFH-like Family: DsrEF-like
5	d2d1pb1	 Alignment		99.9	23	Fold: DsrEFH-like Superfamily: DsrEFH-like Family: DsrEF-like
6	c3mc3A_	 Alignment		99.9	20	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: dsre/dsrf-like family protein; PDBTitle: crystal structure of dsre/dsrf-like family protein (np_342589.1) from2 sulfolobus solfataricus at 1.49 a resolution
7	c2qs7D_	 Alignment		99.8	17	PDB header: oxidoreductase Chain: D: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of a putative oxidoreductase of the dsre/dsrf-like2 family (sso1126) from sulfolobus solfataricus p2 at 2.09 a resolution
8	c3pnxF_	 Alignment		99.7	21	PDB header: transferase Chain: F: PDB Molecule: putative sulfurtransferase dsre; PDBTitle: crystal structure of a putative sulfurtransferase dsre (swol_2425)2 from syntrophomonas wolfei str. goettingen at 1.92 a resolution
9	d2hy5c1	 Alignment		99.4	24	Fold: DsrEFH-like Superfamily: DsrEFH-like Family: DsrH-like
10	c2fb6A_	 Alignment		99.3	12	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: conserved hypothetical protein; PDBTitle: structure of conserved protein of unknown function bt1422 from2 bacteroides thetaiotaomicron
11	d1l1sa_	 Alignment		99.1	13	Fold: DsrEFH-like Superfamily: DsrEFH-like Family: DsrEF-like

12	c2pd2A_	Alignment		99.1	20	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical protein st0148; PDBTitle: crystal structure of (st0148) conserved hypothetical from sulfobolus2 tokodaii strain7
13	d2d1pc1	Alignment		98.8	22	Fold: DsrEFH-like Superfamily: DsrEFH-like Family: DsrH-like
14	d1x9aa_	Alignment		98.3	21	Fold: DsrEFH-like Superfamily: DsrEFH-like Family: DsrH-like
15	c3ia7A_	Alignment		88.2	15	PDB header: transferase Chain: A: PDB Molecule: calg4; PDBTitle: crystal structure of calg4, the calicheamicin glycosyltransferase
16	d1t5ba_	Alignment		88.0	16	Fold: Flavodoxin-like Superfamily: Flavoproteins Family: Quinone reductase
17	d1qlda_	Alignment		84.5	16	Fold: Flavodoxin-like Superfamily: Flavoproteins Family: Quinone reductase
18	c2r60A_	Alignment		82.3	13	PDB header: transferase Chain: A: PDB Molecule: glycosyl transferase, group 1; PDBTitle: structure of apo sucrose phosphate synthase (sps) of2 halothermothrix orenii
19	d1qgoa_	Alignment		80.3	20	Fold: Chelatase-like Superfamily: Chelatase Family: Cobalt chelatase CbiK
20	d2z98a1	Alignment		74.3	19	Fold: Flavodoxin-like Superfamily: Flavoproteins Family: Quinone reductase
21	d1rtta_	Alignment	not modelled	70.3	16	Fold: Flavodoxin-like Superfamily: Flavoproteins Family: NADPH-dependent FMN reductase
22	c2ejbA_	Alignment	not modelled	69.1	27	PDB header: lyase Chain: A: PDB Molecule: probable aromatic acid decarboxylase; PDBTitle: crystal structure of phenylacrylic acid decarboxylase from2 aquifex aeolicus
23	c1qshA_	Alignment	not modelled	59.0	16	PDB header: glutathione biosynthesis ligase Chain: A: PDB Molecule: glutathione biosynthetic ligase; PDBTitle: structure of escherichia coli glutathione synthetase at ph 7.5
24	c3lcmB_	Alignment	not modelled	58.6	9	PDB header: oxidoreductase Chain: B: PDB Molecule: putative oxidoreductase; PDBTitle: crystal structure of smu.1420 from streptococcus mutans ua159
25	d1f0ka_	Alignment	not modelled	54.6	22	Fold: UDP-Glycosyltransferase/glycogen phosphorylase Superfamily: UDP-Glycosyltransferase/glycogen phosphorylase Family: Peptidoglycan biosynthesis glycosyltransferase MurG
26	d1u7za_	Alignment	not modelled	52.8	15	Fold: Ribokinase-like Superfamily: CoaB-like Family: CoaB-like
27	d1gsaa1	Alignment	not modelled	51.0	19	Fold: PreATP-grasp domain Superfamily: PreATP-grasp domain Family: Prokaryotic glutathione synthetase, N-terminal domain
28	d2afhe1	Alignment	not modelled	47.2	20	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Nitrogenase iron protein-like PDB header: transferase

29	c3iaaB_	Alignment	not modelled	45.4	9	Chain: B: PDB Molecule: calg2; PDBTitle: crystal structure of calg2, calicheamicin glycosyltransferase, tdp2 bound form
30	c3c1oA_	Alignment	not modelled	43.9	22	PDB header: oxidoreductase Chain: A: PDB Molecule: eugenol synthase; PDBTitle: the multiple phenylpropene synthases in both clarkia2 breweri and petunia hybrida represent two distinct lineages
31	c2iyfA_	Alignment	not modelled	43.2	11	PDB header: transferase Chain: A: PDB Molecule: oleandomycin glycosyltransferase; PDBTitle: the crystal structure of macrolide glycosyltransferases: a2 blueprint for antibiotic engineering
32	d1xbta1	Alignment	not modelled	41.0	13	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Type II thymidine kinase
33	c2q3eH_	Alignment	not modelled	38.9	12	PDB header: oxidoreductase Chain: H: PDB Molecule: udp-glucose 6-dehydrogenase; PDBTitle: structure of human udp-glucose dehydrogenase complexed with nadh and2 udp-glucose
34	c2x0dA_	Alignment	not modelled	37.1	10	PDB header: transferase Chain: A: PDB Molecule: wsaf; PDBTitle: apo structure of wsaf
35	d1pn3a_	Alignment	not modelled	34.9	27	Fold: UDP-Glycosyltransferase/glycogen phosphorylase Superfamily: UDP-Glycosyltransferase/glycogen phosphorylase Family: Gtf glycosyltransferase
36	d1p9oa_	Alignment	not modelled	34.8	24	Fold: Ribokinase-like Superfamily: CoaB-like Family: CoaB-like
37	c2iyaB_	Alignment	not modelled	34.5	13	PDB header: transferase Chain: B: PDB Molecule: oleandomycin glycosyltransferase; PDBTitle: the crystal structure of macrolide glycosyltransferases: a2 blueprint for antibiotic engineering
38	d1b93a_	Alignment	not modelled	34.0	16	Fold: Methylglyoxal synthase-like Superfamily: Methylglyoxal synthase-like Family: Methylglyoxal synthase, MgsA
39	c3dzcA_	Alignment	not modelled	32.3	16	PDB header: isomerase Chain: A: PDB Molecule: udp-n-acetylglucosamine 2-epimerase; PDBTitle: 2.35 angstrom resolution structure of wecb (vc0917), a udp-n-2 acetylglucosamine 2-epimerase from vibrio cholerae.
40	c3okaA_	Alignment	not modelled	29.5	11	PDB header: transferase Chain: A: PDB Molecule: gdp-mannose-dependent alpha-(1-6)-phosphatidylinositol PDBTitle: crystal structure of corynebacterium glutamicum pimb' in complex with2 gdp-man (triclinic crystal form)
41	c3prjB_	Alignment	not modelled	29.0	12	PDB header: oxidoreductase Chain: B: PDB Molecule: udp-glucose 6-dehydrogenase; PDBTitle: role of packing defects in the evolution of allostery and induced fit2 in human udp-glucose dehydrogenase.
42	c3othB_	Alignment	not modelled	28.5	12	PDB header: transferase/antibiotic Chain: B: PDB Molecule: calg1; PDBTitle: crystal structure of calg1, calicheamicin glycosyltransferase, tdp2 and calicheamicin alpha3i bound form
43	d1vmda_	Alignment	not modelled	27.3	18	Fold: Methylglyoxal synthase-like Superfamily: Methylglyoxal synthase-like Family: Methylglyoxal synthase, MgsA
44	d1ihua1	Alignment	not modelled	27.3	22	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Nitrogenase iron protein-like
45	d1g3qa_	Alignment	not modelled	26.0	16	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Nitrogenase iron protein-like
46	c3l8hC_	Alignment	not modelled	26.0	20	PDB header: hydrolase Chain: C: PDB Molecule: putative haloacid dehalogenase-like hydrolase; PDBTitle: crystal structure of d,d-heptose 1.7-bisphosphate phosphatase from b.2 bronchiseptica complexed with magnesium and phosphate
47	d2qwxal	Alignment	not modelled	25.1	12	Fold: Flavodoxin-like Superfamily: Flavoproteins Family: Quinone reductase
48	c2gk4A_	Alignment	not modelled	25.0	16	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: conserved hypothetical protein; PDBTitle: the crystal structure of the dna/pantothenate metabolism flavoprotein2 from streptococcus pneumoniae
49	d1wzca1	Alignment	not modelled	24.5	17	Fold: HAD-like Superfamily: HAD-like Family: Predicted hydrolases Cof
50	c3oy2A_	Alignment	not modelled	24.4	13	PDB header: viral protein,transferase Chain: A: PDB Molecule: glycosyltransferase b736l; PDBTitle: crystal structure of a putative glycosyltransferase from paramecium2 bursaria chlorella virus ny2a
51	c2bekB_	Alignment	not modelled	24.3	17	PDB header: chromosome segregation Chain: B: PDB Molecule: segregation protein; PDBTitle: structure of the bacterial chromosome segregation protein2 soj
52	c3mt0A_	Alignment	not modelled	24.2	14	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein pa1789; PDBTitle: the crystal structure of a functionally unknown protein pa1789 from2 pseudomonas aeruginosa pao1
53	c1hyqA_	Alignment	not modelled	24.1	17	PDB header: cell cycle Chain: A: PDB Molecule: cell division inhibitor (mind-1); PDBTitle: mind bacterial cell division regulator from a. fulgidus
54	d1hyqa_	Alignment	not modelled	24.1	17	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases

						Family: Nitrogenase iron protein-like Fold: Homo-oligomeric flavin-containing Cys decarboxylases, HFCD Superfamily: Homo-oligomeric flavin-containing Cys decarboxylases, HFCD Family: Homo-oligomeric flavin-containing Cys decarboxylases, HFCD
55	d1p3y1		not modelled	23.7	14	PDB header: oxidoreductase Chain: D: PDB Molecule: epidermin biosynthesis protein epid; PDBTitle: epidermin biosynthesis protein epid from staphylococcus aureus
56	c3qjgD		not modelled	23.4	13	PDB header: lyase Chain: A: PDB Molecule: 2-dehydro-3-deoxyphosphoheptonate aldolase; PDBTitle: crystal structure of pyrococcus furiosus 3-deoxy-d-arabino-2 heptulosonate 7-phosphate synthase
57	c1zcoA		not modelled	23.2	16	PDB header: oxidoreductase Chain: A: PDB Molecule: modulator of drug activity b; PDBTitle: 1.1 angstrom crystal structure of putative modulator of drug activity2 (mdab) from yersinia pestis co92.
58	c3rpeA		not modelled	22.6	20	Fold: Flavodoxin-like Superfamily: Formate/glycerate dehydrogenase catalytic domain-like Family: L-alanine dehydrogenase-like
59	d1l7da2		not modelled	22.6	24	PDB header: metal binding protein Chain: A: PDB Molecule: chelatase, putative; PDBTitle: cobalt chelatase cbik (periplasmatic) from desulvobrio2 vulgaris hildenborough (co-crystallized with cobalt)
60	c2xvzA		not modelled	21.9	11	PDB header: transferase Chain: B: PDB Molecule: glycosyl transferase; PDBTitle: x-ray crystal structure of c-c bond-forming dtdp-d-olivose-transferase2 urdgt2
61	c2p6pB		not modelled	21.9	20	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Formate/glycerate dehydrogenases, NAD-domain
62	d1pjca1		not modelled	20.9	11	PDB header: transferase Chain: A: PDB Molecule: phosphatidylinositol mannosyltransferase (pima); PDBTitle: crystal structure of phosphatidylinositol mannosyltransferase (pima)2 from mycobacterium smegmatis in complex with gdp-man
63	c2gejA		not modelled	20.9	16	PDB header: transferase/rna Chain: B: PDB Molecule: trna delta(2)-isopentenylpyrophosphate transferase; PDBTitle: structure of e. coli isopentenyl-trna transferase in complex with e.2 coli trna(phe)
64	c3fozB		not modelled	20.4	17	Fold: HAD-like Superfamily: HAD-like Family: Predicted hydrolases Cof
65	d1nrwa		not modelled	20.4	11	Fold: Bacillus chorismate mutase-like Superfamily: L30e-like Family: ERF1/Dom34 C-terminal domain-like
66	d2vgna3		not modelled	19.9	10	PDB header: oxidoreductase Chain: C: PDB Molecule: udp-glucose 6-dehydrogenase; PDBTitle: structure of caenorhabditis elegans udp-glucose dehydrogenase
67	c2o3jC		not modelled	19.7	13	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: 6-phosphogluconate dehydrogenase-like, N-terminal domain
68	d1n1ea2		not modelled	19.6	23	PDB header: biosynthetic protein Chain: B: PDB Molecule: tubc protein; PDBTitle: multienzyme docking in hybrid megasynthetases
69	c2jugB		not modelled	19.5	10	PDB header: hydrolase Chain: A: PDB Molecule: putative glycerophosphoryl diester phosphodiesterase; PDBTitle: crystal structure of putative glycerophosphoryl diester2 phosphodiesterase (yp_165505.1) from silicibacter pomeroyi dss-3 at3 1.60 a resolution
70	c3l12A		not modelled	19.4	14	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: haloacid dehalogenase-like hydrolase; PDBTitle: crystal structure of a haloacid dehalogenase-like hydrolase from2 bacteroides thetaiotaomicron
71	c3niwA		not modelled	19.1	14	PDB header: hydrolase Chain: A: PDB Molecule: putative hydrolase; PDBTitle: crystal structure of putative haloacid dehalogenase-like hydrolase2 (yp_001086940.1) from clostridium difficile 630 at 2.10 a resolution
72	c3fzqA		not modelled	18.8	16	Fold: Bacillus chorismate mutase-like Superfamily: L30e-like Family: ERF1/Dom34 C-terminal domain-like
73	d1x52a1		not modelled	18.7	16	Fold: UDP-Glycosyltransferase/glycogen phosphorylase Superfamily: UDP-Glycosyltransferase/glycogen phosphorylase Family: Gtf glycosyltransferase
74	d1iira		not modelled	18.6	16	PDB header: isomerase, lyase Chain: A: PDB Molecule: nad-dependent epimerase/dehydratase; PDBTitle: crystal structure of the putative epimerase q89z24_bactn2 from bacteroides thetaiotaomicron. northeast structural3 genomics consortium target btr310.
75	c3dhnA		not modelled	18.6	19	Fold: Flavodoxin-like Superfamily: Flavoproteins Family: Quinone reductase
76	d1dxqa		not modelled	18.1	13	PDB header: transferase Chain: A: PDB Molecule: probable adenyl-lyl-sulfate kinase; PDBTitle: crystal structure of ape1195
77	c2yvua		not modelled	18.1	16	Fold: HAD-like Superfamily: HAD-like
78	d2b8ea1		not modelled	17.8	8	

					Family: Meta-cation ATPase, catalytic domain P
79	c2hx1D_	Alignment	not modelled	17.7	17 PDB header: hydrolase Chain: D: PDB Molecule: predicted sugar phosphatases of the had PDBTitle: crystal structure of possible sugar phosphatase, had2 superfamily (zp_00311070.1) from cytophaga hutchinsonii3 atcc 33406 at 2.10 a resolution
80	d1nmpa_	Alignment	not modelled	16.8	12 Fold: NIF3 (NGG1p interacting factor 3)-like Superfamily: NIF3 (NGG1p interacting factor 3)-like Family: NIF3 (NGG1p interacting factor 3)-like
81	d1rzua_	Alignment	not modelled	16.8	18 Fold: UDP-Glycosyltransferase/glycogen phosphorylase Superfamily: UDP-Glycosyltransferase/glycogen phosphorylase Family: Glycosyl transferases group 1
82	c2rirA_	Alignment	not modelled	16.7	13 PDB header: oxidoreductase Chain: A: PDB Molecule: dipicolinate synthase, a chain; PDBTitle: crystal structure of dipicolinate synthase, a chain, from bacillus2 subtilis
83	c3dnpA_	Alignment	not modelled	16.6	19 PDB header: structural genomics, unknown function Chain: A: PDB Molecule: stress response protein yhax; PDBTitle: crystal structure of stress response protein yhax from bacillus2 subtilis
84	d1xpja_	Alignment	not modelled	16.4	7 Fold: HAD-like Superfamily: HAD-like Family: Hypothetical protein VC0232
85	d1tjna_	Alignment	not modelled	16.2	5 Fold: Chelatase-like Superfamily: Chelatase Family: CbiX-like
86	c1tjnA_	Alignment	not modelled	16.2	5 PDB header: lyase Chain: A: PDB Molecule: sirohydrochlorin cobaltochelate; PDBTitle: crystal structure of hypothetical protein af0721 from archaeoglobus2 fulgidus
87	c3d0qB_	Alignment	not modelled	16.1	25 PDB header: transferase Chain: B: PDB Molecule: protein calg3; PDBTitle: crystal structure of calg3 from micromonospora echinospora determined2 in space group i222
88	c3fwwA_	Alignment	not modelled	16.0	7 PDB header: structural genomics, unknown function Chain: A: PDB Molecule: putative nad(p)h-dependent fmh reductase; PDBTitle: crystal structure of the q8dwd8_strmu protein from2 streptococcus mutans. northeast structural genomics3 consortium target smr99.
89	c3crqA_	Alignment	not modelled	15.3	13 PDB header: transferase Chain: A: PDB Molecule: trna delta(2)-isopentenylpyrophosphate PDBTitle: structure of trna dimethylallyltransferase: rna2 modification through a channel
90	d1g5ta_	Alignment	not modelled	15.2	7 Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: RecA protein-like (ATPase-domain)
91	c3c4vB_	Alignment	not modelled	15.1	19 PDB header: transferase Chain: B: PDB Molecule: predicted glycosyltransferases; PDBTitle: structure of the retaining glycosyltransferase msha:the2 first step in mycothiol biosynthesis. organism:3 corynebacterium glutamicum : complex with udp and 1l-ins-1-4 p.
92	c1gpiA_	Alignment	not modelled	14.5	19 PDB header: reductase Chain: A: PDB Molecule: glutamyl-trna reductase; PDBTitle: glutamyl-trna reductase from methanopyrus kandleri
93	d1jfla1	Alignment	not modelled	14.5	14 Fold: ATC-like Superfamily: Aspartate/glutamate racemase Family: Aspartate/glutamate racemase
94	c3no3A_	Alignment	not modelled	14.5	19 PDB header: hydrolase Chain: A: PDB Molecule: glycerophosphodiester phosphodiesterase; PDBTitle: crystal structure of a glycerophosphodiester phosphodiesterase2 (bdi_0402) from parabacteroides distasonis atcc 8503 at 1.89 a3 resolution
95	c3d4oA_	Alignment	not modelled	14.4	17 PDB header: oxidoreductase Chain: A: PDB Molecule: dipicolinate synthase subunit a; PDBTitle: crystal structure of dipicolinate synthase subunit a (np_243269.1)2 from bacillus halodurans at 2.10 a resolution
96	d1q77a_	Alignment	not modelled	13.7	9 Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Adenine nucleotide alpha hydrolases-like Family: Universal stress protein-like
97	c2vedA_	Alignment	not modelled	13.7	18 PDB header: transferase Chain: A: PDB Molecule: membrane protein capa1, protein tyrosine kinase; PDBTitle: crystal structure of the chimerical mutant capabk55m2 protein
98	c3ouzA_	Alignment	not modelled	13.6	18 PDB header: ligase Chain: A: PDB Molecule: biotin carboxylase; PDBTitle: crystal structure of biotin carboxylase-adp complex from campylobacter2 jejuni
99	d1cp2a_	Alignment	not modelled	13.4	14 Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Nitrogenase iron protein-like