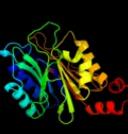
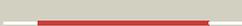
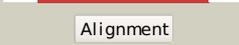
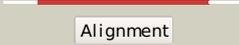
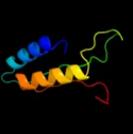
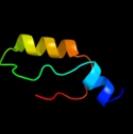
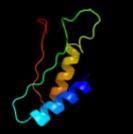
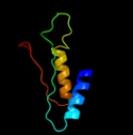
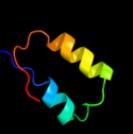
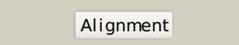
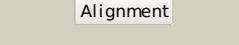
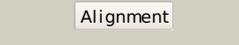
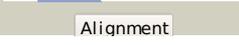


Phyre2

Email	I.a.kelley@imperial.ac.uk
Description	Q47679
Date	Thu Jan 5 12:36:58 GMT 2012
Unique Job ID	18f581c9a470d52b

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c2e11B_	 Alignment		100.0	48	PDB header: hydrolase Chain: B: PDB Molecule: hydrolase; PDBTitle: the crystal structure of xc1258 from xanthomonas campestris: a cn-2 hydrolase superfamily protein with an arsenic adduct in the active3 site
2	c2vhiG_	 Alignment		100.0	18	PDB header: hydrolase Chain: G: PDB Molecule: cg3027-pa; PDBTitle: crystal structure of a pyrimidine degrading enzyme from2 drosophila melanogaster
3	c1emsB_	 Alignment		100.0	26	PDB header: antitumor protein Chain: B: PDB Molecule: nit-fragile histidine triad fusion protein; PDBTitle: crystal structure of the c. elegans nitfhit protein
4	c2plqA_	 Alignment		100.0	20	PDB header: hydrolase Chain: A: PDB Molecule: aliphatic amidase; PDBTitle: crystal structure of the amidase from geobacillus pallidus rapc8
5	c2e2kC_	 Alignment		100.0	15	PDB header: hydrolase Chain: C: PDB Molecule: formamidase; PDBTitle: helicobacter pylori formamidase amif contains a fine-tuned cysteine-2 glutamate-lysine catalytic triad
6	c2w1vA_	 Alignment		100.0	22	PDB header: hydrolase Chain: A: PDB Molecule: nitrilase homolog 2; PDBTitle: crystal structure of mouse nitrilase-2 at 1.4a resolution
7	d1emsa2	 Alignment		100.0	25	Fold: Carbon-nitrogen hydrolase Superfamily: Carbon-nitrogen hydrolase Family: Nitrilase
8	d1uf5a_	 Alignment		100.0	23	Fold: Carbon-nitrogen hydrolase Superfamily: Carbon-nitrogen hydrolase Family: Carbamylase
9	d1f89a_	 Alignment		100.0	23	Fold: Carbon-nitrogen hydrolase Superfamily: Carbon-nitrogen hydrolase Family: Nitrilase
10	c3dlaD_	 Alignment		100.0	17	PDB header: ligase Chain: D: PDB Molecule: glutamine-dependent nad(+) synthetase; PDBTitle: x-ray crystal structure of glutamine-dependent nad+ synthetase from2 mycobacterium tuberculosis bound to naad+ and don
11	d1j31a_	 Alignment		100.0	22	Fold: Carbon-nitrogen hydrolase Superfamily: Carbon-nitrogen hydrolase Family: Carbamylase

12	c3hkxA_	 Alignment		100.0	23	PDB header: hydrolase Chain: A: PDB Molecule: amidase; PDBTitle: crystal structure analysis of an amidase from nesterenkonkia sp.
13	c3n05B_	 Alignment		100.0	21	PDB header: ligase Chain: B: PDB Molecule: nh(3)-dependent nad(+) synthetase; PDBTitle: crystal structure of nh3-dependent nad+ synthetase from streptomyces2 avermitilis
14	c3ilvA_	 Alignment		100.0	18	PDB header: ligase Chain: A: PDB Molecule: glutamine-dependent nad(+) synthetase; PDBTitle: crystal structure of a glutamine-dependent nad(+) synthetase2 from cytophaga hutchinsonii
15	d1o60a_	 Alignment		82.6	4	Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: Class I DAHP synthetase
16	c3rqzC_	 Alignment		75.1	24	PDB header: hydrolase Chain: C: PDB Molecule: metallophosphoesterase; PDBTitle: crystal structure of metallophosphoesterase from sphaerobacter2 thermophilus
17	d1d9ea_	 Alignment		70.0	7	Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: Class I DAHP synthetase
18	c3sz8D_	 Alignment		54.8	6	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
19	c2qw5B_	 Alignment		51.1	12	PDB header: isomerase Chain: B: PDB Molecule: xylose isomerase-like tim barrel; PDBTitle: crystal structure of a putative sugar phosphate isomerase/epimerase2 (ava4194) from anaabaena variabilis atcc 29413 at 1.78 a resolution
20	c3qfnA_	 Alignment		38.9	35	PDB header: hydrolase Chain: A: PDB Molecule: putative uncharacterized protein; PDBTitle: crystal structure of streptococcal asymmetric ap4a hydrolase and2 phosphodiesterase spr1479/saph in complex with inorganic phosphate
21	c3stgA_	 Alignment	not modelled	36.9	8	PDB header: transferase Chain: A: PDB Molecule: 2-dehydro-3-deoxyphosphooctonate aldolase; PDBTitle: crystal structure of a58p, del(n59), and loop 7 truncated mutant of 3-2 deoxy-d-manno-octulosonate 8-phosphate synthase (kdo8ps) from3 neisseria meningitidis
22	c1s3mA_	 Alignment	not modelled	36.9	16	PDB header: phosphodiesterase Chain: A: PDB Molecule: hypothetical protein mj0936; PDBTitle: structural and functional characterization of a novel2 archaeal phosphodiesterase
23	d1s3la_	 Alignment	not modelled	36.9	16	Fold: Metallo-dependent phosphatases Superfamily: Metallo-dependent phosphatases Family: YfcE-like
24	d3c9ua1	 Alignment	not modelled	31.5	9	Fold: Bacillus chorismate mutase-like Superfamily: PurM N-terminal domain-like Family: PurM N-terminal domain-like
25	d1uf3a_	 Alignment	not modelled	31.0	23	Fold: Metallo-dependent phosphatases Superfamily: Metallo-dependent phosphatases Family: TT1561-like
26	c2o14A_	 Alignment	not modelled	30.2	17	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical protein yxim; PDBTitle: x-ray crystal structure of protein yxim_bacsu from bacillus2 subtilis. northeast structural genomics consortium target3 sr595
27	c2ei9A_	 Alignment	not modelled	29.5	17	PDB header: gene regulation Chain: A: PDB Molecule: non-ltr retrotransposon r1bms orf2 protein; PDBTitle: crystal structure of r1bm endonuclease domain
28	d1q7ra_	 Alignment	not modelled	28.6	14	Fold: Flavodoxin-like Superfamily: Class I glutamine amidotransferase-like

						Family: Class I glutamine amidotransferases (GAT)
29	c1su1A	Alignment	not modelled	24.8	26	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical protein yfce; PDBTitle: structural and biochemical characterization of yfce, a2 phosphoesterase from e. coli
30	d1su1a	Alignment	not modelled	24.8	26	Fold: Metallo-dependent phosphatases Superfamily: Metallo-dependent phosphatases Family: YfcE-like
31	d1gpma2	Alignment	not modelled	24.4	12	Fold: Flavodoxin-like Superfamily: Class I glutamine amidotransferase-like Family: Class I glutamine amidotransferases (GAT)
32	d1wdua	Alignment	not modelled	23.2	7	Fold: DNase I-like Superfamily: DNase I-like Family: DNase I-like
33	c2fu3A	Alignment	not modelled	19.7	13	PDB header: biosynthetic protein/structural protein Chain: A: PDB Molecule: gephyrin; PDBTitle: crystal structure of gephyrin e-domain
34	d1yx1a1	Alignment	not modelled	17.7	8	Fold: TIM beta/alpha-barrel Superfamily: Xylose isomerase-like Family: KguE-like
35	c1wu8B	Alignment	not modelled	16.8	15	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: hypothetical protein ph0463; PDBTitle: crystal structure of project ph0463 from pyrococcus horikoshii ot3
36	d3ck2a1	Alignment	not modelled	15.4	9	Fold: Metallo-dependent phosphatases Superfamily: Metallo-dependent phosphatases Family: YfcE-like
37	c3pzvB	Alignment	not modelled	15.2	8	PDB header: hydrolase Chain: B: PDB Molecule: endoglucanase; PDBTitle: c2 crystal form of the endo-1,4-beta-glucanase from bacillus subtilis2 168
38	d1hd7a	Alignment	not modelled	15.1	7	Fold: DNase I-like Superfamily: DNase I-like Family: DNase I-like
39	c3ju2A	Alignment	not modelled	14.8	15	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein smc04130; PDBTitle: crystal structure of protein smc04130 from sinorhizobium meliloti 1021
40	d1ydga	Alignment	not modelled	13.8	14	Fold: Flavodoxin-like Superfamily: Flavoproteins Family: WrbA-like
41	c3o3cD	Alignment	not modelled	13.4	9	PDB header: transferase Chain: D: PDB Molecule: glycogen [starch] synthase isoform 2; PDBTitle: glycogen synthase basal state udp complex
42	d4pgaa	Alignment	not modelled	13.0	11	Fold: Glutaminase/Asparaginase Superfamily: Glutaminase/Asparaginase Family: Glutaminase/Asparaginase
43	d1vyba	Alignment	not modelled	12.6	14	Fold: DNase I-like Superfamily: DNase I-like Family: DNase I-like
44	d1oi7a1	Alignment	not modelled	11.9	11	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: CoA-binding domain
45	d1i60a	Alignment	not modelled	11.4	20	Fold: TIM beta/alpha-barrel Superfamily: Xylose isomerase-like Family: loll-like
46	d2abwa1	Alignment	not modelled	11.2	21	Fold: Flavodoxin-like Superfamily: Class I glutamine amidotransferase-like Family: Class I glutamine amidotransferases (GAT)
47	d1clib1	Alignment	not modelled	11.1	13	Fold: Bacillus chorismate mutase-like Superfamily: PurM N-terminal domain-like Family: PurM N-terminal domain-like
48	c2q8uA	Alignment	not modelled	10.5	16	PDB header: hydrolase Chain: A: PDB Molecule: exonuclease, putative; PDBTitle: crystal structure of mre11 from thermotoga maritima msb8 (tm1635) at2 2.20 a resolution
49	c2issF	Alignment	not modelled	10.4	16	PDB header: lyase, transferase Chain: F: PDB Molecule: glutamine amidotransferase subunit pdxt; PDBTitle: structure of the plp synthase holoenzyme from thermotoga maritima
50	d2q02a1	Alignment	not modelled	10.3	10	Fold: TIM beta/alpha-barrel Superfamily: Xylose isomerase-like Family: loll-like
51	d1z7da1	Alignment	not modelled	10.2	22	Fold: PLP-dependent transferase-like Superfamily: PLP-dependent transferases Family: GABA-aminotransferase-like
52	d1sffa	Alignment	not modelled	10.0	15	Fold: PLP-dependent transferase-like Superfamily: PLP-dependent transferases Family: GABA-aminotransferase-like
53	c3ngoA	Alignment	not modelled	9.9	20	PDB header: hydrolase/dna Chain: A: PDB Molecule: ccr4-not transcription complex subunit 6-like; PDBTitle: crystal structure of the human cnot6l nuclease domain in complex with2 poly(a) dna
54	d1xi3a	Alignment	not modelled	9.7	14	Fold: TIM beta/alpha-barrel Superfamily: Thiamin phosphate synthase Family: Thiamin phosphate synthase
55	c3tahA	Alignment	not modelled	9.4	10	PDB header: hydrolase Chain: A: PDB Molecule: endonuclease/exonuclease/phosphatase;

55	c3tewA_	Alignment	not modelled	9.4	10	PDBTitle: endonuclease/exonuclease/phosphatase family protein from leptotrichia2 buccalis c-1013-b
56	d1jfla1	Alignment	not modelled	9.4	18	Fold: ATC-like Superfamily: Aspartate/glutamate racemase Family: Aspartate/glutamate racemase
57	c3qxbB_	Alignment	not modelled	8.1	9	PDB header: isomerase Chain: B: PDB Molecule: putative xylose isomerase; PDBTitle: crystal structure of a putative xylose isomerase (yp_426450.1) from2 rhodospirillum rubrum atcc 11170 at 1.90 a resolution
58	c3n0lA_	Alignment	not modelled	8.0	13	PDB header: transferase Chain: A: PDB Molecule: serine hydroxymethyltransferase; PDBTitle: crystal structure of serine hydroxymethyltransferase from2 campylobacter jejuni
59	d2imqx1	Alignment	not modelled	7.8	20	Fold: DNase I-like Superfamily: DNase I-like Family: Inositol polyphosphate 5-phosphatase (IPP5)
60	d1nlfa_	Alignment	not modelled	7.6	25	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: RecA protein-like (ATPase-domain)
61	c3bgwD_	Alignment	not modelled	7.6	5	PDB header: replication Chain: D: PDB Molecule: dnab-like replicative helicase; PDBTitle: the structure of a dnab-like replicative helicase and its interactions2 with primase
62	c2ou4C_	Alignment	not modelled	7.5	16	PDB header: isomerase Chain: C: PDB Molecule: d-tagatose 3-epimerase; PDBTitle: crystal structure of d-tagatose 3-epimerase from2 pseudomonas cichorii
63	c3nb0A_	Alignment	not modelled	7.4	10	PDB header: transferase Chain: A: PDB Molecule: glycogen [starch] synthase isoform 2; PDBTitle: glucose-6-phosphate activated form of yeast glycogen synthase
64	d2zoda1	Alignment	not modelled	7.3	6	Fold: Bacillus chorismate mutase-like Superfamily: PurM N-terminal domain-like Family: PurM N-terminal domain-like
65	d1f06a1	Alignment	not modelled	7.3	11	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Glyceraldehyde-3-phosphate dehydrogenase-like, N-terminal domain
66	c3t9aA_	Alignment	not modelled	7.1	11	PDB header: transferase Chain: A: PDB Molecule: inositol pyrophosphate kinase; PDBTitle: crystal structure of the catalytic domain of human di-phosphoinositol 2 pentakisphosphate kinase 2 (ppip5k2) in complex with amppnp at ph 7.0
67	c2zsmA_	Alignment	not modelled	7.1	16	PDB header: isomerase Chain: A: PDB Molecule: glutamate-1-semialdehyde 2,1-aminomutase; PDBTitle: crystal structure of glutamate-1-semialdehyde 2,1-2 aminomutase from aeropyrum pernix, hexagonal form
68	c1chmA_	Alignment	not modelled	7.1	15	PDB header: creatinase Chain: A: PDB Molecule: creatine amidinohydrolase; PDBTitle: enzymatic mechanism of creatine amidinohydrolase as deduced2 from crystal structures
69	c3pnxF_	Alignment	not modelled	7.0	14	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
70	c3bh0A_	Alignment	not modelled	6.8	5	PDB header: replication Chain: A: PDB Molecule: dnab-like replicative helicase; PDBTitle: atpase domain of g40p
71	c3iacA_	Alignment	not modelled	6.5	12	PDB header: isomerase Chain: A: PDB Molecule: glucuronate isomerase; PDBTitle: 2.2 angstrom crystal structure of glucuronate isomerase from2 salmonella typhimurium.
72	d2z1ea1	Alignment	not modelled	6.4	11	Fold: Bacillus chorismate mutase-like Superfamily: PurM N-terminal domain-like Family: PurM N-terminal domain-like
73	c2rb9D_	Alignment	not modelled	6.3	18	PDB header: structural genomics, unknown function Chain: D: PDB Molecule: hype protein; PDBTitle: crystal structure of e.coli hype
74	c2wltA_	Alignment	not modelled	6.2	10	PDB header: hydrolase Chain: A: PDB Molecule: l-asparaginase; PDBTitle: the crystal structure of helicobacter pylori l-asparaginase2 at 1.4 a resolution
75	c1e9nB_	Alignment	not modelled	6.2	7	PDB header: dna repair Chain: B: PDB Molecule: dna-(apurinic or apyrimidinic site) lyase; PDBTitle: a second divalent metal ion in the active site of a new2 crystal form of human apurinic/apyrimidinic endonuclease,3 ape1, and its implications for the catalytic mechanism
76	d2zaua1	Alignment	not modelled	6.2	8	Fold: Bacillus chorismate mutase-like Superfamily: PurM N-terminal domain-like Family: PurM N-terminal domain-like
77	c2exuA_	Alignment	not modelled	6.0	18	PDB header: transcription Chain: A: PDB Molecule: transcription initiation protein spt4/spt5; PDBTitle: crystal structure of saccharomyces cerevisiae transcription elongation2 factors spt4-spt5ngn domain
78	c1vqvB_	Alignment	not modelled	6.0	11	PDB header: transferase Chain: B: PDB Molecule: thiamine monophosphate kinase; PDBTitle: crystal structure of thiamine monophosphate kinase (thi1)2 from aquifex aeolicus
79	d1muwa_	Alignment	not modelled	6.0	14	Fold: TIM beta/alpha-barrel Superfamily: Xylose isomerase-like Family: Xylose isomerase
80	c2i63B_	Alignment	not modelled	5.9	17	PDB header: lyase Chain: B: PDB Molecule: ap-endonuclease;

80	c2j93B_	Alignment	not modelled	5.9	17	PDBTitle: crystal structure of ap endonuclease Imap from leishmania2 major PDB header: lyase
81	c3dx5A_	Alignment	not modelled	5.7	6	Chain: A: PDB Molecule: uncharacterized protein asbf; PDBTitle: crystal structure of the probable 3-dhs dehydratase asbf involved in2 the petrobactin synthesis from bacillus anthracis
82	c3gfgB_	Alignment	not modelled	5.4	22	PDB header: oxidoreductase Chain: B: PDB Molecule: uncharacterized oxidoreductase yvaa; PDBTitle: structure of putative oxidoreductase yvaa from bacillus subtilis in2 triclinic form
83	c1ezaA_	Alignment	not modelled	5.4	9	PDB header: phosphotransferase Chain: A: PDB Molecule: enzyme i; PDBTitle: amino terminal domain of enzyme i from escherichia coli nmr,2 restrained regularized mean structure
84	c3cwcB_	Alignment	not modelled	5.3	14	PDB header: transferase Chain: B: PDB Molecule: putative glycerate kinase 2; PDBTitle: crystal structure of putative glycerate kinase 2 from salmonella2 typhimurium lt2
85	c3tr9A_	Alignment	not modelled	5.1	14	PDB header: transferase Chain: A: PDB Molecule: dihydropteroate synthase; PDBTitle: structure of a dihydropteroate synthase (folp) in complex with pteroi2 acid from coxiella burnetii
86	d1prxa_	Alignment	not modelled	5.1	8	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like