






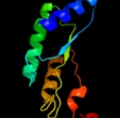





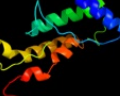


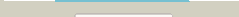






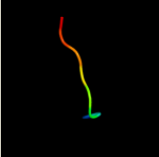



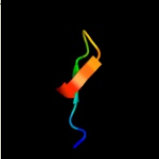

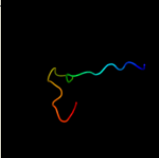
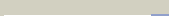
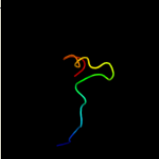

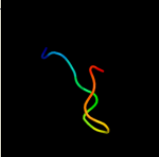



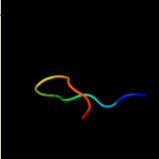







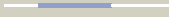
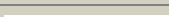
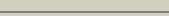


Phyre2

Email	I.a.kelley@imperial.ac.uk
Description	P0A6G5
Date	Thu Jan 5 11:03:06 GMT 2012
Unique Job ID	b155b223b06b4a1c

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c3mcnA_	 Alignment		84.7	18	PDB header: transferase Chain: A: PDB Molecule: 2-amino-4-hydroxy-6-hydroxymethyl dihydropteridine PDBTitle: crystal structure of the 6-hydroxymethyl-7,8-dihydropterin2 pyrophosphokinase dihydropteroate synthase bifunctional enzyme from3 francisella tularensis
2	d1f6ya_	 Alignment		67.3	15	Fold: TIM beta/alpha-barrel Superfamily: Dihydropteroate synthetase-like Family: Methyltetrahydrofolate-utilizing methyltransferases
3	c2cg8B_	 Alignment		58.3	38	PDB header: lyase/transferase Chain: B: PDB Molecule: dihydroneopterin aldolase 6-hydroxymethyl-7,8- PDBTitle: the bifunctional dihydroneopterin aldolase 6-hydroxymethyl-2 7,8-dihydropterin synthase from streptococcus pneumoniae
4	d3bofa1	 Alignment		42.5	15	Fold: TIM beta/alpha-barrel Superfamily: Dihydropteroate synthetase-like Family: Methyltetrahydrofolate-utilizing methyltransferases
5	c3a1yG_	 Alignment		40.5	27	PDB header: ribosomal protein Chain: G: PDB Molecule: acidic ribosomal protein p0; PDBTitle: the structure of protein complex
6	d1f9ya_	 Alignment		39.5	20	Fold: Ferredoxin-like Superfamily: 6-hydroxymethyl-7,8-dihydropterin pyrophosphokinase, HPPK Family: 6-hydroxymethyl-7,8-dihydropterin pyrophosphokinase, HPPK
7	c3k13A_	 Alignment		37.7	12	PDB header: transferase Chain: A: PDB Molecule: 5-methyltetrahydrofolate-homocysteine methyltransferase; PDBTitle: structure of the pterin-binding domain metr of 5-2 methyltetrahydrofolate-homocysteine methyltransferase from3 bacteroides thetaiotaomicron
8	c2bpbB_	 Alignment		36.7	8	PDB header: oxidoreductase Chain: B: PDB Molecule: sulfite\cytochrome c oxidoreductase subunit b; PDBTitle: sulfite dehydrogenase from starkeya novella
9	c2qx0A_	 Alignment		36.4	17	PDB header: transferase Chain: A: PDB Molecule: 7,8-dihydro-6-hydroxymethyl pterin- PDBTitle: crystal structure of yersinia pestis hppk (ternary complex)
10	c2yciX_	 Alignment		35.9	14	PDB header: transferase Chain: X: PDB Molecule: 5-methyltetrahydrofolate corrinoid/iron sulfur protein PDBTitle: methyltransferase native
11	d1glua_	 Alignment		35.0	50	Fold: Glucocorticoid receptor-like (DNA-binding domain) Superfamily: Glucocorticoid receptor-like (DNA-binding domain) Family: Nuclear receptor

12	c1xyr6_	 Alignment		31.5	33	PDB header: virus Chain: 6: PDB Molecule: genome polyprotein, coat protein vp3; PDB Fragment: residues 620-630 PDBTitle: poliovirus 135s cell entry intermediate
13	dls6la1	 Alignment		30.7	29	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: MerB N-terminal domain-like
14	dlidszb_	 Alignment		29.6	15	Fold: Glucocorticoid receptor-like (DNA-binding domain) Superfamily: Glucocorticoid receptor-like (DNA-binding domain) Family: Nuclear receptor
15	dlnm8a1	 Alignment		26.8	19	Fold: CoA-dependent acyltransferases Superfamily: CoA-dependent acyltransferases Family: Choline/Carnitine O-acyltransferase
16	dlndba1	 Alignment		26.5	19	Fold: CoA-dependent acyltransferases Superfamily: CoA-dependent acyltransferases Family: Choline/Carnitine O-acyltransferase
17	dllo1a_	 Alignment		25.9	46	Fold: Glucocorticoid receptor-like (DNA-binding domain) Superfamily: Glucocorticoid receptor-like (DNA-binding domain) Family: Nuclear receptor
18	dlkb6b_	 Alignment		25.5	45	Fold: Glucocorticoid receptor-like (DNA-binding domain) Superfamily: Glucocorticoid receptor-like (DNA-binding domain) Family: Nuclear receptor
19	c1r4iA_	 Alignment		24.6	42	PDB header: transcription/dna Chain: A: PDB Molecule: androgen receptor; PDBTitle: crystal structure of androgen receptor dna-binding domain2 bound to a direct repeat response element
20	d1r4ia_	 Alignment		24.6	42	Fold: Glucocorticoid receptor-like (DNA-binding domain) Superfamily: Glucocorticoid receptor-like (DNA-binding domain) Family: Nuclear receptor
21	dlcbka_	 Alignment	not modelled	22.7	18	Fold: Ferredoxin-like Superfamily: 6-hydroxymethyl-7,8-dihydropterin pyrophosphokinase, HPPK Family: 6-hydroxymethyl-7,8-dihydropterin pyrophosphokinase, HPPK
22	c1no3A_	 Alignment	not modelled	22.1	37	PDB header: oxidoreductase Chain: A: PDB Molecule: lipoygenase-3; PDBTitle: refined structure of soybean lipoygenase-3 with 4-nitrocatechol at2 2.15 angstrom resolution
23	d3bnea1	 Alignment	not modelled	22.0	33	Fold: Lipoxigenase Superfamily: Lipoxigenase Family: Plant lipoxigenases
24	d1hcqa_	 Alignment	not modelled	21.9	33	Fold: Glucocorticoid receptor-like (DNA-binding domain) Superfamily: Glucocorticoid receptor-like (DNA-binding domain) Family: Nuclear receptor
25	c1u22A_	 Alignment	not modelled	20.1	17	PDB header: transferase Chain: A: PDB Molecule: 5-methyltetrahydropteroyltriglutamate-- PDBTitle: a. thaliana cobalamine independent methionine synthase
26	d1hraa_	 Alignment	not modelled	18.6	17	Fold: Glucocorticoid receptor-like (DNA-binding domain) Superfamily: Glucocorticoid receptor-like (DNA-binding domain) Family: Nuclear receptor
27	c2envA_	 Alignment	not modelled	18.6	25	PDB header: transcription Chain: A: PDB Molecule: peroxisome proliferator-activated receptor delta; PDBTitle: solution sturcture of the c4-type zinc finger domain from2 human peroxisome proliferator-activated receptor delta
28	d1phza1	 Alignment	not modelled	18.5	14	Fold: Ferredoxin-like Superfamily: ACT-like Family: Phenylalanine metabolism regulatory domain

29	c1t7qA_	Alignment	not modelled	17.9	19	PDB header: transferase Chain: A: PDB Molecule: carnitine acetyltransferase; PDBTitle: crystal structure of the f565a mutant of murine carnitine2 acetyltransferase in complex with carnitine and coa
30	d1ynwa1	Alignment	not modelled	17.7	42	Fold: Glucocorticoid receptor-like (DNA-binding domain) Superfamily: Glucocorticoid receptor-like (DNA-binding domain) Family: Nuclear receptor
31	d1r4ra_	Alignment	not modelled	17.4	50	Fold: Glucocorticoid receptor-like (DNA-binding domain) Superfamily: Glucocorticoid receptor-like (DNA-binding domain) Family: Nuclear receptor
32	c2h4tB_	Alignment	not modelled	17.4	29	PDB header: transferase Chain: B: PDB Molecule: carnitine o-palmitoyltransferase ii, PDBTitle: crystal structure of rat carnitine palmitoyltransferase ii
33	d1u1ha2	Alignment	not modelled	16.1	17	Fold: TIM beta/alpha-barrel Superfamily: UROD/MetE-like Family: Cobalamin-independent methionine synthase
34	c1nj2A_	Alignment	not modelled	16.0	23	PDB header: ligase Chain: A: PDB Molecule: proline-trna synthetase; PDBTitle: crystal structure of prolyl-trna synthetase from methanothermobacter2 thermotrophicus
35	c2e9hA_	Alignment	not modelled	15.9	12	PDB header: translation Chain: A: PDB Molecule: eukaryotic translation initiation factor 5; PDBTitle: solution structure of the eif-5_eif-2b domain from human2 eukaryotic translation initiation factor 5
36	c1qfqB_	Alignment	not modelled	15.4	31	PDB header: transcription/rna Chain: B: PDB Molecule: 36-mer n-terminal peptide of the n protein; PDBTitle: bacteriophage lambda n-protein-nutboxb-rna complex
37	d1nj1a2	Alignment	not modelled	15.2	30	Fold: IF3-like Superfamily: C-terminal domain of ProRS Family: C-terminal domain of ProRS
38	d1hc7a3	Alignment	not modelled	15.2	30	Fold: IF3-like Superfamily: C-terminal domain of ProRS Family: C-terminal domain of ProRS
39	c2y9zA_	Alignment	not modelled	15.1	7	PDB header: transcription Chain: A: PDB Molecule: imitation switch protein 1 (del_atpase); PDBTitle: chromatin remodeling factor isw1a(del_atpase) in dna complex
40	c2eb1A_	Alignment	not modelled	14.5	14	PDB header: transcription Chain: A: PDB Molecule: coup transcription factor 1; PDBTitle: solution structure of the zinc finger, c4-type domain of2 human coup transcription factor 1
41	d1lata_	Alignment	not modelled	14.4	50	Fold: Glucocorticoid receptor-like (DNA-binding domain) Superfamily: Glucocorticoid receptor-like (DNA-binding domain) Family: Nuclear receptor
42	d1naqa_	Alignment	not modelled	14.4	11	Fold: Ferredoxin-like Superfamily: GlnB-like Family: Divalent ion tolerance proteins CutA (CutA1)
43	c2fyoA_	Alignment	not modelled	14.1	29	PDB header: transferase Chain: A: PDB Molecule: carnitine o-palmitoyltransferase ii, PDBTitle: crystal structure of rat carnitine palmitoyltransferase 22 in space group p43212
44	d1rrha1	Alignment	not modelled	13.7	30	Fold: Lipoxigenase Superfamily: Lipoxigenase Family: Plant lipoxigenases
45	d1nzaa_	Alignment	not modelled	13.0	11	Fold: Ferredoxin-like Superfamily: GlnB-like Family: Divalent ion tolerance proteins CutA (CutA1)
46	d1g2ra_	Alignment	not modelled	12.9	18	Fold: YlXR-like Superfamily: YlXR-like Family: YlXR-like
47	d1z5ye1	Alignment	not modelled	12.8	19	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
48	c1xk8A_	Alignment	not modelled	12.7	13	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: divalent cation tolerant protein cuta; PDBTitle: divalent cation tolerant protein cuta from homo sapiens2 o60888
49	d2zfha1	Alignment	not modelled	12.7	13	Fold: Ferredoxin-like Superfamily: GlnB-like Family: Divalent ion tolerance proteins CutA (CutA1)
50	d1vjea_	Alignment	not modelled	12.4	16	Fold: LuxS/MPP-like metallohydrolase Superfamily: LuxS/MPP-like metallohydrolase Family: Autoinducer-2 production protein LuxS
51	c2x4jA_	Alignment	not modelled	11.6	67	PDB header: viral protein Chain: A: PDB Molecule: hypothetical protein orf137; PDBTitle: crystal structure of orf137 from pyrobaculum spherical2 virus
52	d1j6xa_	Alignment	not modelled	11.5	19	Fold: LuxS/MPP-like metallohydrolase Superfamily: LuxS/MPP-like metallohydrolase Family: Autoinducer-2 production protein LuxS
53	c2zfha_	Alignment	not modelled	11.5	13	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: cuta; PDBTitle: crystal structure of putative cuta1 from homo sapiens at 2.05a2 resolution
54	d1kr4a_	Alignment	not modelled	11.5	16	Fold: Ferredoxin-like Superfamily: GlnB-like Family: Divalent ion tolerance proteins CutA (CutA1)
55	c2nuhA_	Alignment	not modelled	11.5	21	PDB header: unknown function Chain: A: PDB Molecule: periplasmic divalent cation tolerance protein; PDBTitle: crystal structure of cuta from the phytopathgen bacterium

						xylella2 fastidiosia
56	c2p0gB_	Alignment	not modelled	11.4	9	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: selenoprotein w-related protein; PDBTitle: crystal structure of selenoprotein w-related protein from2 vibrio cholerae. northeast structural genomics target vcr75
57	d1lukua_	Alignment	not modelled	11.2	8	Fold: Ferredoxin-like Superfamily: GlnB-like Family: Divalent ion tolerance proteins CutA (CutA1)
58	c2dcuB_	Alignment	not modelled	11.1	12	PDB header: translation Chain: B: PDB Molecule: translation initiation factor 2 beta subunit; PDBTitle: crystal structure of translation initiation factor aif2betagamma2 heterodimer with gdp
59	c1neeA_	Alignment	not modelled	11.0	16	PDB header: translation Chain: A: PDB Molecule: probable translation initiation factor 2 beta PDBTitle: structure of archaeal translation factor aif2beta from2 methanobacterium thermoautrophicum
60	c3dexA_	Alignment	not modelled	10.9	17	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: sav_2001; PDBTitle: crystal structure of sav_2001 protein from streptomyces2 avermitilis, northeast structural genomics consortium3 target svr107.
61	c2kpaA_	Alignment	not modelled	10.8	27	PDB header: hydrolase Chain: A: PDB Molecule: arno(375-400); PDBTitle: specific motifs of the v-atpase a2-subunit isoform interact2 with catalytic and regulatory domains of arno
62	c2ojlB_	Alignment	not modelled	10.6	22	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: hypothetical protein; PDBTitle: crystal structure of q7waf1_borpa from bordetella parapertussis.2 northeast structural genomics target bpr68.
63	c3ialB_	Alignment	not modelled	10.5	33	PDB header: ligase Chain: B: PDB Molecule: prolyl-trna synthetase; PDBTitle: giardia lamblia prolyl-trna synthetase in complex with prolyl-2 adenylate
64	d2hfva1	Alignment	not modelled	10.2	28	Fold: Ferredoxin-like Superfamily: GlnB-like Family: RPA1041-like
65	d1j98a_	Alignment	not modelled	10.1	21	Fold: LuxS/MPP-like metallohydrolase Superfamily: LuxS/MPP-like metallohydrolase Family: Autoinducer-2 production protein LuxS
66	c3bboY_	Alignment	not modelled	10.1	21	PDB header: ribosome Chain: Y: PDB Molecule: ribosomal protein l28; PDBTitle: homology model for the spinach chloroplast 50s subunit2 fitted to 9.4a cryo-em map of the 70s chlororibosome
67	d1tx2a_	Alignment	not modelled	9.4	14	Fold: TIM beta/alpha-barrel Superfamily: Dihydropteroate synthetase-like Family: Dihydropteroate synthetase
68	c1tx2A_	Alignment	not modelled	9.4	14	PDB header: transferase Chain: A: PDB Molecule: dhps, dihydropteroate synthase; PDBTitle: dihydropteroate synthetase, with bound inhibitor manic, from bacillus2 anthracis
69	c3mwbA_	Alignment	not modelled	9.4	19	PDB header: lyase Chain: A: PDB Molecule: prephenate dehydratase; PDBTitle: the crystal structure of prephenate dehydratase in complex with l-phe2 from arthrobacter aureescens to 2.0a
70	d2jz6a1	Alignment	not modelled	9.2	20	Fold: L28p-like Superfamily: L28p-like Family: Ribosomal protein L28
71	c3ahpA_	Alignment	not modelled	9.1	14	PDB header: electron transport Chain: A: PDB Molecule: cuta1; PDBTitle: crystal structure of stable protein, cuta1, from a psychrotrophic2 bacterium shewanella sp. sib1
72	d1j6wa_	Alignment	not modelled	9.1	19	Fold: LuxS/MPP-like metallohydrolase Superfamily: LuxS/MPP-like metallohydrolase Family: Autoinducer-2 production protein LuxS
73	d1pbya1	Alignment	not modelled	9.0	5	Fold: Cytochrome c Superfamily: Cytochrome c Family: Quinohemoprotein amine dehydrogenase A chain, domains 1 and 2
74	c2hfvA_	Alignment	not modelled	8.7	28	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical protein rpa1041; PDBTitle: solution nmr structure of protein rpa1041 from pseudomonas2 aeruginosa. northeast structural genomics consortium3 target pat90.
75	d2es7a1	Alignment	not modelled	8.4	19	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: HyaE-like
76	d2nllb_	Alignment	not modelled	8.3	30	Fold: Glucocorticoid receptor-like (DNA-binding domain) Superfamily: Glucocorticoid receptor-like (DNA-binding domain) Family: Nuclear receptor
77	d2qamz1	Alignment	not modelled	8.3	16	Fold: L28p-like Superfamily: L28p-like Family: Ribosomal protein L28
78	d1dsza_	Alignment	not modelled	8.2	22	Fold: Glucocorticoid receptor-like (DNA-binding domain) Superfamily: Glucocorticoid receptor-like (DNA-binding domain) Family: Nuclear receptor
79	d1k5oa_	Alignment	not modelled	8.2	39	Fold: Myosin phosphatase inhibitor 17kDa protein, CPI-17 Superfamily: Myosin phosphatase inhibitor 17kDa protein, CPI-17 Family: Myosin phosphatase inhibitor 17kDa protein, CPI-17
80	d1vhfa_	Alignment	not modelled	8.1	16	Fold: Ferredoxin-like Superfamily: GlnB-like Family: Divalent ion tolerance proteins CutA (CutA1)
						Fold: Myosin phosphatase inhibitor 17kDa protein, CPI-17

81	d1j2na_	Alignment	not modelled	7.8	36	Superfamily: Myosin phosphatase inhibitor 17kDa protein, CPI-17 Family: Myosin phosphatase inhibitor 17kDa protein, CPI-17
82	d1kb2a_	Alignment	not modelled	7.7	40	Fold: Glucocorticoid receptor-like (DNA-binding domain) Superfamily: Glucocorticoid receptor-like (DNA-binding domain) Family: Nuclear receptor
83	d1cita_	Alignment	not modelled	7.7	44	Fold: Glucocorticoid receptor-like (DNA-binding domain) Superfamily: Glucocorticoid receptor-like (DNA-binding domain) Family: Nuclear receptor
84	d1p1la_	Alignment	not modelled	7.6	8	Fold: Ferredoxin-like Superfamily: GlnB-like Family: Divalent ion tolerance proteins CutA (CutA1)
85	c1a92B_	Alignment	not modelled	7.5	35	PDB header: leucine zipper Chain: B: PDB Molecule: delta antigen; PDBTitle: oligomerization domain of hepatitis delta antigen
86	c3jyw8_	Alignment	not modelled	7.5	17	PDB header: ribosome Chain: 8: PDB Molecule: 60s ribosomal protein lp0; PDBTitle: structure of the 60s proteins for eukaryotic ribosome based on cryo-em2 map of thermomyces lanuginosus ribosome at 8.9a resolution
87	d1xl7a1	Alignment	not modelled	7.2	35	Fold: CoA-dependent acyltransferases Superfamily: CoA-dependent acyltransferases Family: Choline/Carnitine O-acyltransferase
88	c2xm5A_	Alignment	not modelled	6.9	12	PDB header: transferase Chain: A: PDB Molecule: clcq; PDBTitle: structural and mechanistic analysis of the magnesium-2 independent aromatic prenyltransferase clcq from the3 clorobiocin biosynthetic pathway
89	c2zomC_	Alignment	not modelled	6.9	16	PDB header: unknown function Chain: C: PDB Molecule: protein cuta, chloroplast, putative, expressed; PDBTitle: crystal structure of cuta1 from oryza sativa
90	d2qmwa2	Alignment	not modelled	6.8	14	Fold: Ferredoxin-like Superfamily: ACT-like Family: Phenylalanine metabolism regulatory domain
91	c2kpbA_	Alignment	not modelled	6.8	27	PDB header: hydrolase Chain: A: PDB Molecule: arno-p(375-400); PDBTitle: specific motifs of the v-atpase a2-subunit isoform interact2 with catalytic and regulatory domains of arno
92	d1jmxal	Alignment	not modelled	6.8	8	Fold: Cytochrome c Superfamily: Cytochrome c Family: Quinohemoprotein amine dehydrogenase A chain, domains 1 and 2
93	d1ef4a_	Alignment	not modelled	6.7	50	Fold: DNA/RNA-binding 3-helical bundle Superfamily: RNA polymerase subunit RPB10 Family: RNA polymerase subunit RPB10
94	c3swfA_	Alignment	not modelled	6.7	17	PDB header: transport protein Chain: A: PDB Molecule: cgm-p-gated cation channel alpha-1; PDBTitle: cnga1 621-690 containing clz domain
95	c1yx7A_	Alignment	not modelled	6.5	12	PDB header: metal binding protein Chain: A: PDB Molecule: calsensin; PDBTitle: nmr structure of calnsensin, energy minimized average2 structure.
96	d2d8va1	Alignment	not modelled	6.4	38	Fold: B-box zinc-binding domain Superfamily: B-box zinc-binding domain Family: B-box zinc-binding domain
97	d1yuza2	Alignment	not modelled	6.2	14	Fold: Rubredoxin-like Superfamily: Rubredoxin-like Family: Rubredoxin
98	c1lj2B_	Alignment	not modelled	6.1	33	PDB header: viral protein/ translation Chain: B: PDB Molecule: nonstructural rna-binding protein 34; PDBTitle: recognition of eif4g by rotavirus nsp3 reveals a basis for2 mrna circularization
99	d1tluu1	Alignment	not modelled	6.1	25	Fold: CoA-dependent acyltransferases Superfamily: CoA-dependent acyltransferases Family: Choline/Carnitine O-acyltransferase