







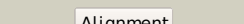

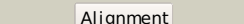

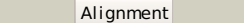

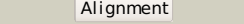

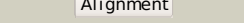

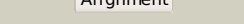
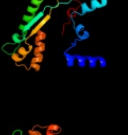
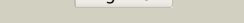



Phyre2

Email	l.a.kelley@imperial.ac.uk
Description	P09373
Date	Thu Jan 5 11:02:15 GMT 2012
Unique Job ID	973cbb7f09cb6b84

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	dlh16a_	 Alignment		100.0	100	Fold: PFL-like glycy radical enzymes Superfamily: PFL-like glycy radical enzymes Family: PFL-like
2	dlqhma_	 Alignment		100.0	100	Fold: PFL-like glycy radical enzymes Superfamily: PFL-like glycy radical enzymes Family: PFL-like
3	dlr9da_	 Alignment		100.0	28	Fold: PFL-like glycy radical enzymes Superfamily: PFL-like glycy radical enzymes Family: PFL-like
4	c2y8nC_	 Alignment		100.0	21	PDB header: lyase Chain: C: PDB Molecule: 4-hydroxyphenylacetate decarboxylase large subunit; PDBTitle: crystal structure of glycy radical enzyme
5	c2f3oB_	 Alignment		100.0	21	PDB header: unknown function Chain: B: PDB Molecule: pyruvate formate-lyase 2; PDBTitle: crystal structure of a glycy radical enzyme from archaeoglobus2 fulgidus
6	dlhk8a_	 Alignment		99.5	16	Fold: PFL-like glycy radical enzymes Superfamily: PFL-like glycy radical enzymes Family: Class III anaerobic ribonucleotide reductase NRDD subunit
7	c1hk8A_	 Alignment		99.5	16	PDB header: oxidoreductase Chain: A: PDB Molecule: anaerobic ribonucleotide-triphosphate reductase; PDBTitle: structural basis for allosteric substrate specificity2 regulation in class iii ribonucleotide reductases:3 nrdd in complex with dgtp
8	c2cvuA_	 Alignment		90.9	13	PDB header: oxidoreductase Chain: A: PDB Molecule: ribonucleoside-diphosphate reductase large chain PDBTitle: structures of yeast ribonucleotide reductase i
9	c2wghA_	 Alignment		89.1	16	PDB header: oxidoreductase Chain: A: PDB Molecule: ribonucleoside-diphosphate reductase large PDBTitle: human ribonucleotide reductase r1 subunit (rrm1) in complex2 with datp and mg.
10	c3hnfA_	 Alignment		88.4	16	PDB header: oxidoreductase Chain: A: PDB Molecule: ribonucleoside-diphosphate reductase large subunit; PDBTitle: crystal structure of human ribonucleotide reductase 1 bound to the2 effectors ttp and datp
11	c1xjeA_	 Alignment		87.0	17	PDB header: oxidoreductase Chain: A: PDB Molecule: ribonucleotide reductase, b12-dependent; PDBTitle: structural mechanism of allosteric substrate specificity in a2 ribonucleotide reductase: dttp-gdp complex

12	c3rlrB_	<div><div></div><div>Alignment</div></div>		84.4	17	PDB header: complex (oxidoreductase/peptide) Chain: B: PDB Molecule: ribonucleotide reductase r1 protein; PDBTitle: ribonucleotide reductase r1 protein with amppnp occupying2 the activity site from escherichia coli
13	c3gr1A_	<div><div></div><div>Alignment</div></div>		71.8	23	PDB header: membrane protein Chain: A: PDB Molecule: protein prgh; PDBTitle: periplasmic domain of the t3ss inner membrane protein prgh2 from s.typhimurium (fragment 170-392)
14	c1pemA_	<div><div></div><div>Alignment</div></div>		69.8	14	PDB header: oxidoreductase Chain: A: PDB Molecule: ribonucleoside-diphosphate reductase 2 alpha PDBTitle: ribonucleotide reductase protein r1e from salmonella2 typhimurium
15	d1rlra2	<div><div></div><div>Alignment</div></div>		66.9	18	Fold: PFL-like glycy radical enzymes Superfamily: PFL-like glycy radical enzymes Family: R1 subunit of ribonucleotide reductase, C-terminal domain
16	d2bgxa1	<div><div></div><div>Alignment</div></div>		56.3	20	Fold: PGBD-like Superfamily: PGBD-like Family: Peptidoglycan binding domain, PGBD
17	d1u5tb1	<div><div></div><div>Alignment</div></div>		50.3	16	Fold: DNA/RNA-binding 3-helical bundle Superfamily:" Winged helix" DNA-binding domain Family: Vacuolar sorting protein domain
18	c3gr0D_	<div><div></div><div>Alignment</div></div>		48.9	23	PDB header: membrane protein Chain: D: PDB Molecule: protein prgh; PDBTitle: periplasmic domain of the t3ss inner membrane protein prgh from2 s.typhimurium (fragment 170-362)
19	d1dq3a4	<div><div></div><div>Alignment</div></div>		46.9	19	Fold: Homing endonuclease-like Superfamily: Homing endonucleases Family: Intein endonuclease
20	c2jobA_	<div><div></div><div>Alignment</div></div>		40.5	24	PDB header: lipid binding protein Chain: A: PDB Molecule: antilipopolsaccharide factor; PDBTitle: solution structure of an antilipopolsaccharide factor from2 shrimp and its possible lipid a binding site
21	d1jvaa3	<div><div></div><div>Alignment</div></div>	not modelled	36.3	10	Fold: Homing endonuclease-like Superfamily: Homing endonucleases Family: Intein endonuclease
22	d2i15a1	<div><div></div><div>Alignment</div></div>	not modelled	34.0	28	Fold: MG296-like Superfamily: MG296-like Family: MG296-like
23	c2vkjA_	<div><div></div><div>Alignment</div></div>	not modelled	28.9	24	PDB header: membrane protein Chain: A: PDB Molecule: tm1634; PDBTitle: structure of the soluble domain of the membrane protein2 tm1634 from thermotoga maritima
24	d2di0a1	<div><div></div><div>Alignment</div></div>	not modelled	24.5	22	Fold: RuvA C-terminal domain-like Superfamily: UBA-like Family: CUE domain
25	c3gebC_	<div><div></div><div>Alignment</div></div>	not modelled	23.3	24	PDB header: hydrolase Chain: C: PDB Molecule: eyes absent homolog 2; PDBTitle: crystal structure of edeya2
26	d1ztda1	<div><div></div><div>Alignment</div></div>	not modelled	21.7	25	Fold: RNase III domain-like Superfamily: RNase III domain-like Family: PF0609-like
27	c3uo9B_	<div><div></div><div>Alignment</div></div>	not modelled	21.4	20	PDB header: hydrolase/hydrolase inhibitor Chain: B: PDB Molecule: glutaminase kidney isoform, mitochondrial; PDBTitle: crystal structure of human gac in complex with glutamate and bptes
28	d1nh2a2	<div><div></div><div>Alignment</div></div>	not modelled	20.3	36	Fold: TBP-like Superfamily: TATA-box binding protein-like Family: TATA-box binding protein (TBP), C-terminal domain
		<div><div></div><div>Alignment</div></div>				Fold: TRP-like

29	d1aisa1	Alignment	not modelled	19.9	36	Superfamily: TATA-box binding protein-like Family: TATA-box binding protein (TBP), C-terminal domain
30	d1nh2a1	Alignment	not modelled	19.7	25	Fold: TBP-like Superfamily: TATA-box binding protein-like Family: TATA-box binding protein (TBP), C-terminal domain
31	c1r8jB_	Alignment	not modelled	19.7	24	PDB header: circadian clock protein Chain: B: PDB Molecule: kaia; PDBTitle: crystal structure of circadian clock protein kaia from2 synechococcus elongatus
32	d1qnaa2	Alignment	not modelled	19.1	36	Fold: TBP-like Superfamily: TATA-box binding protein-like Family: TATA-box binding protein (TBP), C-terminal domain
33	d1mp9a1	Alignment	not modelled	19.0	29	Fold: TBP-like Superfamily: TATA-box binding protein-like Family: TATA-box binding protein (TBP), C-terminal domain
34	d1aisa2	Alignment	not modelled	18.8	36	Fold: TBP-like Superfamily: TATA-box binding protein-like Family: TATA-box binding protein (TBP), C-terminal domain
35	c2khvA_	Alignment	not modelled	18.3	12	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: phage integrase; PDBTitle: solution nmr structure of protein nmul_a0922 from2 nitrosospira multiformis. northeast structural genomics3 consortium target nmr38b.
36	d1v5ra1	Alignment	not modelled	17.8	33	Fold: N domain of copper amine oxidase-like Superfamily: GAS2 domain-like Family: GAS2 domain
37	d1rpya_	Alignment	not modelled	17.7	17	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
38	d1qnaa1	Alignment	not modelled	17.6	25	Fold: TBP-like Superfamily: TATA-box binding protein-like Family: TATA-box binding protein (TBP), C-terminal domain
39	d1jwoa_	Alignment	not modelled	17.4	39	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
40	d1mp9a2	Alignment	not modelled	17.3	42	Fold: TBP-like Superfamily: TATA-box binding protein-like Family: TATA-box binding protein (TBP), C-terminal domain
41	d1w7pd1	Alignment	not modelled	16.4	19	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Vacuolar sorting protein domain
42	c2q01A_	Alignment	not modelled	16.4	19	PDB header: isomerase Chain: A: PDB Molecule: uronate isomerase; PDBTitle: crystal structure of glucuronate isomerase from caulobacter crescentus
43	c2hjhB_	Alignment	not modelled	16.1	44	PDB header: hydrolase Chain: B: PDB Molecule: nad-dependent histone deacetylase sir2; PDBTitle: crystal structure of the sir2 deacetylase
44	d1uj8a1	Alignment	not modelled	15.8	22	Fold: Another 3-helical bundle Superfamily: IscX-like Family: IscX-like
45	d1vioa2	Alignment	not modelled	15.5	17	Fold: Alpha-L RNA-binding motif Superfamily: Alpha-L RNA-binding motif Family: Pseudouridine synthase RsuA N-terminal domain
46	d1cdwa1	Alignment	not modelled	15.5	25	Fold: TBP-like Superfamily: TATA-box binding protein-like Family: TATA-box binding protein (TBP), C-terminal domain
47	c3knyA_	Alignment	not modelled	14.9	14	PDB header: unknown function Chain: A: PDB Molecule: hypothetical protein bt_3535; PDBTitle: crystal structure of a two domain protein with unknown function2 (bt_3535) from bacteroides thetaiotaomicron vpi-5482 at 2.60 a3 resolution
48	d1k9aa2	Alignment	not modelled	14.6	29	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
49	c2a7oA_	Alignment	not modelled	14.2	29	PDB header: transcription Chain: A: PDB Molecule: huntingtin interacting protein b; PDBTitle: solution structure of the hset2/hypb sri domain
50	d1bf5a3	Alignment	not modelled	13.9	12	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
51	c2k5eA_	Alignment	not modelled	13.6	8	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: solution structure of putative uncharacterized protein2 gsu1278 from methanocaldococcus jannaschii, northeast3 structural genomics consortium (nesg) target gsr195
52	c2zcyM_	Alignment	not modelled	13.1	28	PDB header: hydrolase Chain: M: PDB Molecule: proteasome component pre4; PDBTitle: yeast 20s proteasome:syringolin a-complex
53	d1i3za_	Alignment	not modelled	13.0	25	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
54	c3vjjA_	Alignment	not modelled	12.9	23	PDB header: viral protein Chain: A: PDB Molecule: p9-1; PDBTitle: crystal structure analysis of the p9-1
55	d1xlya_	Alignment	not modelled	12.9	22	Fold: RNA-binding protein She2p Superfamily: RNA-binding protein She2p Family: RNA-binding protein She2p

56	d1fs7a_	Alignment	not modelled	12.8	13	Fold: Multiheme cytochromes Superfamily: Multiheme cytochromes Family: Di-heme elbow motif
57	c1fs9A_	Alignment	not modelled	12.8	13	PDB header: oxidoreductase Chain: A: PDB Molecule: cytochrome c nitrite reductase; PDBTitle: cytochrome c nitrite reductase from wolinnella succinogenes-azide2 complex
58	d2nlua1	Alignment	not modelled	12.4	44	Fold: SH3-like barrel Superfamily: Tudor/PWWP/MBT Family: PWWP domain
59	d1dwka2	Alignment	not modelled	12.3	21	Fold: Cyanase C-terminal domain Superfamily: Cyanase C-terminal domain Family: Cyanase C-terminal domain
60	d1cdwa2	Alignment	not modelled	12.3	25	Fold: TBP-like Superfamily: TATA-box binding protein-like Family: TATA-box binding protein (TBP), C-terminal domain
61	c3pkiF_	Alignment	not modelled	12.3	32	PDB header: hydrolase Chain: F: PDB Molecule: nad-dependent deacetylase sirtuin-6; PDBTitle: human sirt6 crystal structure in complex with adp ribose
62	c3gd5D_	Alignment	not modelled	12.2	19	PDB header: transferase Chain: D: PDB Molecule: ornithine carbamoyltransferase; PDBTitle: crystal structure of ornithine carbamoyltransferase from gloeobacter2 violaceus
63	c2ci8A_	Alignment	not modelled	12.2	24	PDB header: translation Chain: A: PDB Molecule: cytoplasmic protein nck1; PDBTitle: sh2 domain of human nck1 adaptor protein - uncomplexed
64	c3k35D_	Alignment	not modelled	12.1	32	PDB header: hydrolase Chain: D: PDB Molecule: nad-dependent deacetylase sirtuin-6; PDBTitle: crystal structure of human sirt6
65	c2q82A_	Alignment	not modelled	11.9	35	PDB header: structural protein Chain: A: PDB Molecule: core protein p7; PDBTitle: crystal structure of core protein p7 from pseudomonas phage2 phi12. northeast structural genomics target oc1
66	d1u8sa1	Alignment	not modelled	11.9	13	Fold: Ferredoxin-like Superfamily: ACT-like Family: Glycine cleavage system transcriptional repressor
67	c2hx6A_	Alignment	not modelled	11.9	14	PDB header: hydrolase Chain: A: PDB Molecule: ribonuclease; PDBTitle: solution structure analysis of the phage t42 endoribonuclease regb
68	d1p9ka_	Alignment	not modelled	11.9	14	Fold: Alpha-L RNA-binding motif Superfamily: Alpha-L RNA-binding motif Family: Ybcj-like
69	c2ksgA_	Alignment	not modelled	11.8	28	PDB header: antibiotic Chain: A: PDB Molecule: dermcidin; PDBTitle: solution structure of dermcidin-11, a human antibiotic2 peptide
70	c3d36B_	Alignment	not modelled	11.7	13	PDB header: transferase/transferase inhibitor Chain: B: PDB Molecule: sporulation kinase b; PDBTitle: how to switch off a histidine kinase: crystal structure of2 geobacillus stearothermophilus kinb with the inhibitor sda
71	c2pmzV_	Alignment	not modelled	11.7	12	PDB header: translation, transferase Chain: V: PDB Molecule: dna-directed rna polymerase subunit h; PDBTitle: archaeal rna polymerase from sulfolobus solfataricus
72	c3df1R_	Alignment	not modelled	11.6	19	PDB header: ribosome Chain: R: PDB Molecule: 30s ribosomal protein s18; PDBTitle: crystal structure of the bacterial ribosome from escherichia2 coli in complex with hygromycin b. this file contains the3 30s subunit of the first 70s ribosome, with hygromycin b4 bound. the entire crystal structure contains two 70s5 ribosomes.
73	c3d2rB_	Alignment	not modelled	11.4	9	PDB header: transferase Chain: B: PDB Molecule: [pyruvate dehydrogenase [lipoamide]] kinase isozyme 4; PDBTitle: crystal structure of pyruvate dehydrogenase kinase isoform 4 in2 complex with adp
74	c2vpmB_	Alignment	not modelled	11.4	11	PDB header: ligase Chain: B: PDB Molecule: trypanothione synthetase; PDBTitle: trypanothione synthetase
75	d1hmja_	Alignment	not modelled	11.3	9	Fold: RPB5-like RNA polymerase subunit Superfamily: RPB5-like RNA polymerase subunit Family: RPB5
76	c3pcsB_	Alignment	not modelled	11.2	18	PDB header: protein transport/transferase Chain: B: PDB Molecule: espg; PDBTitle: structure of espg-pak2 autoinhibitory ialpha3 helix complex
77	d1yuaa2	Alignment	not modelled	11.1	11	Fold: Rubredoxin-like Superfamily: Zinc beta-ribbon Family: Prokaryotic DNA topoisomerase I, a C-terminal fragment
78	d1dzfa2	Alignment	not modelled	11.0	14	Fold: RPB5-like RNA polymerase subunit Superfamily: RPB5-like RNA polymerase subunit Family: RPB5
79	d1etea_	Alignment	not modelled	10.9	10	Fold: 4-helical cytokines Superfamily: 4-helical cytokines Family: Short-chain cytokines
80	d1qada_	Alignment	not modelled	10.8	12	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
81	c2i6lB_	Alignment	not modelled	10.8	14	PDB header: transferase Chain: B: PDB Molecule: mitogen-activated protein kinase 6; PDBTitle: crystal structure of human mitogen activated protein kinase2 6 (mapk6)
						Fold: SH2-like

82	d1a81e1	Alignment	not modelled	10.6	29	Superfamily: SH2 domain Family: SH2 domain
83	c3sohB	Alignment	not modelled	10.6	29	PDB header: motor protein Chain: B: PDB Molecule: flagellar motor switch protein flag; PDBTitle: architecture of the flagellar rotor
84	c2uval	Alignment	not modelled	10.6	12	PDB header: transferase Chain: I: PDB Molecule: fatty acid synthase beta subunits; PDBTitle: crystal structure of fatty acid synthase from thermomyces2 lanuginosus at 3.1 angstrom resolution. this file contains3 the beta subunits of the fatty acid synthase. the entire4 crystal structure consists of one heterododecameric fatty5 acid synthase and is described in remark 400
85	c2kj8A	Alignment	not modelled	10.4	13	PDB header: dna binding protein Chain: A: PDB Molecule: putative prophage cps-53 integrase; PDBTitle: nmr structure of fragment 87-196 from the putative phage2 integrase ints of e. coli: northeast structural genomics3 consortium target er652a, psi-2
86	d2uubr1	Alignment	not modelled	10.4	26	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Ribosomal protein S18 Family: Ribosomal protein S18
87	d1eika	Alignment	not modelled	10.3	16	Fold: RPB5-like RNA polymerase subunit Superfamily: RPB5-like RNA polymerase subunit Family: RPB5
88	c3t4aG	Alignment	not modelled	10.1	33	PDB header: immune system Chain: G: PDB Molecule: fibrinogen-binding protein; PDBTitle: structure of a truncated form of staphylococcal complement inhibitor b2 bound to human c3c at 3.4 angstrom resolution
89	d2b4ya1	Alignment	not modelled	10.1	22	Fold: DHS-like NAD/FAD-binding domain Superfamily: DHS-like NAD/FAD-binding domain Family: Sir2 family of transcriptional regulators
90	d1jyra	Alignment	not modelled	10.1	38	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
91	c3ol0C	Alignment	not modelled	10.1	50	PDB header: de novo protein Chain: C: PDB Molecule: de novo designed monomer trefoil-fold sub-domain which PDBTitle: crystal structure of monofoil-4p homo-trimer: de novo designed monomer2 trefoil-fold sub-domain which forms homo-trimer assembly
92	c3hp7A	Alignment	not modelled	10.0	24	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hemolysin, putative; PDBTitle: putative hemolysin from streptococcus thermophilus.
93	c1mqrA	Alignment	not modelled	10.0	21	PDB header: hydrolase Chain: A: PDB Molecule: alpha-d-glucuronidase; PDBTitle: the crystal structure of alpha-d-glucuronidase (e386q) from bacillus2 stearothermophilus t-6
94	c3dxnA	Alignment	not modelled	9.9	19	PDB header: transferase Chain: A: PDB Molecule: calmodulin-like domain protein kinase isoform 3; PDBTitle: crystal structure of the calcium-dependent kinase from toxoplasma2 gondii, 541.m00134, kinase domain.
95	d1yc5a1	Alignment	not modelled	9.8	32	Fold: DHS-like NAD/FAD-binding domain Superfamily: DHS-like NAD/FAD-binding domain Family: Sir2 family of transcriptional regulators
96	c3cekA	Alignment	not modelled	9.7	10	PDB header: transferase Chain: A: PDB Molecule: dual specificity protein kinase ttk; PDBTitle: crystal structure of human dual specificity protein kinase (ttk)
97	c3nzbB	Alignment	not modelled	9.6	13	PDB header: lyase Chain: B: PDB Molecule: biosynthetic arginine decarboxylase; PDBTitle: crystal structure of biosynthetic arginine decarboxylase adc (spea)2 from escherichia coli, northeast structural genomics consortium3 target er600
98	c3gxxB	Alignment	not modelled	9.5	13	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
99	c2vkzH	Alignment	not modelled	9.4	13	PDB header: transferase Chain: H: PDB Molecule: fatty acid synthase subunit beta; PDBTitle: structure of the cerulenin-inhibited fungal fatty acid2 synthase type i multienzyme complex