
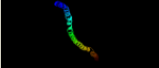
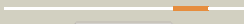
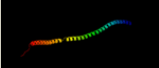

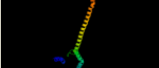

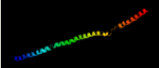

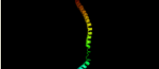

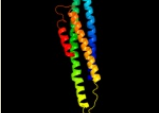

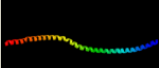

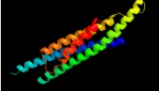



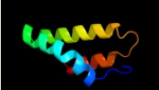


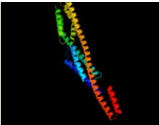
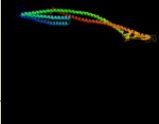





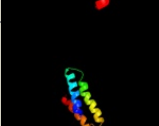
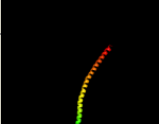


Phyre2

Email	I.a.kelley@imperial.ac.uk
Description	P33790
Date	Thu Jan 5 11:52:39 GMT 2012
Unique Job ID	65ab397f58c1a679

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c3ghgK_	 Alignment		88.0	11	PDB header: blood clotting Chain: K; PDB Molecule: fibrinogen beta chain; PDBTitle: crystal structure of human fibrinogen
2	c1ei3E_	 Alignment		85.0	6	PDB header: PDB COMPND:
3	c3ojaB_	 Alignment		83.3	8	PDB header: protein binding Chain: B; PDB Molecule: anopheles plasmodium-responsive leucine-rich repeat protein PDBTitle: crystal structure of Irim1/apl1c complex
4	c1degO_	 Alignment		82.7	14	PDB header: PDB COMPND:
5	c1degF_	 Alignment		80.7	6	PDB header: PDB COMPND:
6	c3cwgA_	 Alignment		74.9	6	PDB header: transcription Chain: A; PDB Molecule: signal transducer and activator of transcription PDBTitle: unphosphorylated mouse stat3 core fragment
7	c1ei3C_	 Alignment		72.1	6	PDB header: PDB COMPND:
8	c1bf5A_	 Alignment		59.3	4	PDB header: gene regulation/dna Chain: A; PDB Molecule: signal transducer and activator of transcription PDBTitle: tyrosine phosphorylated stat-1/dna complex
9	c2kr6A_	 Alignment		49.2	10	PDB header: hydrolase Chain: A; PDB Molecule: presenilin-1; PDBTitle: solution structure of presenilin-1 ctf subunit
10	c2a5yA_	 Alignment		47.1	12	PDB header: apoptosis Chain: A; PDB Molecule: apoptosis regulator ced-9; PDBTitle: structure of a ced-4/ced-9 complex
11	c1bg1A_	 Alignment		38.5	5	PDB header: transcription/dna Chain: A; PDB Molecule: protein (transcription factor stat3b); PDBTitle: transcription factor stat3b/dna complex

12	c1f5nA_	Alignment		27.9	9	PDB header: signaling protein Chain: A: PDB Molecule: interferon-induced guanylate-binding protein 1; PDBTitle: human guanylate binding protein-1 in complex with the gtp2 analogue, gmppnp.
13	c1ciiA_	Alignment		27.5	8	PDB header: transmembrane protein Chain: A: PDB Molecule: colicin ia; PDBTitle: colicin ia
14	c2k8jX_	Alignment		27.0	31	PDB header: viral protein Chain: X: PDB Molecule: p7tm2; PDBTitle: solution structure of hcv p7 tm2
15	d1ji6a3	Alignment		23.6	16	Fold: Toxins' membrane translocation domains Superfamily: delta-Endotoxin (insecticide), N-terminal domain Family: delta-Endotoxin (insecticide), N-terminal domain
16	c1b9uA_	Alignment		19.7	24	PDB header: hydrolase Chain: A: PDB Molecule: protein (atp synthase); PDBTitle: membrane domain of the subunit b of the e.coli atp synthase
17	d1r3jc_	Alignment		17.4	6	Fold: Voltage-gated potassium channels Superfamily: Voltage-gated potassium channels Family: Voltage-gated potassium channels
18	c1mhsA_	Alignment		16.8	10	PDB header: membrane protein, proton transport Chain: A: PDB Molecule: plasma membrane atpase; PDBTitle: model of neurospora crassa proton atpase
19	d1o0la_	Alignment		16.5	9	Fold: Toxins' membrane translocation domains Superfamily: Bcl-2 inhibitors of programmed cell death Family: Bcl-2 inhibitors of programmed cell death
20	c3dtpA_	Alignment		15.2	6	PDB header: contractile protein Chain: A: PDB Molecule: myosin 2 heavy chain chimera of smooth and PDBTitle: tarantula heavy meromyosin obtained by flexible docking to2 tarantula muscle thick filament cryo-em 3d-map
21	c1ylvB_	Alignment	not modelled	14.4	6	PDB header: signaling protein Chain: B: PDB Molecule: signal transducer and activator of transcription PDBTitle: structure of unphosphorylated stat1
22	d2r6gf1	Alignment	not modelled	13.8	15	Fold: MalF N-terminal region-like Superfamily: MalF N-terminal region-like Family: MalF N-terminal region-like
23	c1g8xB_	Alignment	not modelled	13.7	6	PDB header: structural protein Chain: B: PDB Molecule: myosin ii heavy chain fused to alpha-actinin 3; PDBTitle: structure of a genetically engineered molecular motor
24	c2xa0A_	Alignment	not modelled	13.7	11	PDB header: apoptosis Chain: A: PDB Molecule: apoptosis regulator bcl-2; PDBTitle: crystal structure of bcl-2 in complex with a bax bh32 peptide
25	c2eceA_	Alignment	not modelled	13.4	26	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: 462aa long hypothetical selenium-binding protein; PDBTitle: x-ray structure of hypothetical selenium-binding protein2 from sulfolobus tokodaii, st0059
26	c2wpqA_	Alignment	not modelled	12.8	7	PDB header: membrane protein Chain: A: PDB Molecule: trimeric autotransporter adhesin fragment PDBTitle: salmonella enterica sada 479-519 fused to gcn4 adaptors (2 sadak3, in-register fusion)
27	c2ki9A_	Alignment	not modelled	12.7	30	PDB header: membrane protein Chain: A: PDB Molecule: cannabinoid receptor 2; PDBTitle: human cannabinoid receptor-2 helix 6
28	d2i5nl1	Alignment	not modelled	12.0	11	Fold: Bacterial photosystem II reaction centre, L and M subunits Superfamily: Bacterial photosystem II reaction centre, L and M subunits Family: Bacterial photosystem II reaction centre, L and M subunits

29	c3ifxB_	Alignment	not modelled	10.9	9	PDB header: membrane protein Chain: B: PDB Molecule: voltage-gated potassium channel; PDBTitle: crystal structure of the spin-labeled kcsa mutant v48r1
30	c2yv6A_	Alignment	not modelled	10.7	20	PDB header: apoptosis Chain: A: PDB Molecule: bcl-2 homologous antagonist/killer; PDBTitle: crystal structure of human bcl-2 family protein bak
31	c1ma1E_	Alignment	not modelled	10.4	19	PDB header: oxidoreductase Chain: E: PDB Molecule: superoxide dismutase; PDBTitle: structure and properties of the atypical iron superoxide2 dismutase from methanobacterium thermoautotrophicum
32	c2rddB_	Alignment	not modelled	10.4	30	PDB header: membrane protein/transport protein Chain: B: PDB Molecule: upf0092 membrane protein yajc; PDBTitle: x-ray crystal structure of acrb in complex with a novel2 transmembrane helix.
33	c2nybC_	Alignment	not modelled	9.8	10	PDB header: oxidoreductase Chain: C: PDB Molecule: superoxide dismutase [fe]; PDBTitle: crystal structure of e.coli iron superoxide dismutase q69e2 at 1.1 angstrom resolution
34	d1rh1a2	Alignment	not modelled	9.7	16	Fold: Toxins' membrane translocation domains Superfamily: Colicin Family: Colicin
35	d1vbga3	Alignment	not modelled	9.7	6	Fold: ATP-grasp Superfamily: Glutathione synthetase ATP-binding domain-like Family: Pyruvate phosphate dikinase, N-terminal domain
36	c1y67D_	Alignment	not modelled	9.5	10	PDB header: oxidoreductase Chain: D: PDB Molecule: manganese superoxide dismutase; PDBTitle: crystal structure of manganese superoxide dismutase from2 deinococcus radiodurans
37	c1kkcB_	Alignment	not modelled	9.4	10	PDB header: oxidoreductase Chain: B: PDB Molecule: manganese superoxide dismutase; PDBTitle: crystal structure of aspergillus fumigatus mnsod
38	d1y9ia_	Alignment	not modelled	9.3	9	Fold: YutG-like Superfamily: YutG-like Family: YutG-like
39	c3k07A_	Alignment	not modelled	9.3	8	PDB header: transport protein Chain: A: PDB Molecule: cation efflux system protein cusa; PDBTitle: crystal structure of cusa
40	c1jchC_	Alignment	not modelled	9.2	8	PDB header: ribosome inhibitor, hydrolase Chain: C: PDB Molecule: colicin e3; PDBTitle: crystal structure of colicin e3 in complex with its immunity protein
41	c2o2fA_	Alignment	not modelled	9.2	11	PDB header: apoptosis Chain: A: PDB Molecule: apoptosis regulator bcl-2; PDBTitle: solution structure of the anti-apoptotic protein bcl-2 in2 complex with an acyl-sulfonamide-based ligand
42	d1uerc2	Alignment	not modelled	9.1	14	Fold: Fe,Mn superoxide dismutase (SOD), C-terminal domain Superfamily: Fe,Mn superoxide dismutase (SOD), C-terminal domain Family: Fe,Mn superoxide dismutase (SOD), C-terminal domain
43	c1avmA_	Alignment	not modelled	9.0	14	PDB header: oxidoreductase Chain: A: PDB Molecule: superoxide dismutase; PDBTitle: the cambialistic superoxide dismutase (fe-sod) of p. shermanii2 coordinated by azide
44	d1wb8a2	Alignment	not modelled	8.9	14	Fold: Fe,Mn superoxide dismutase (SOD), C-terminal domain Superfamily: Fe,Mn superoxide dismutase (SOD), C-terminal domain Family: Fe,Mn superoxide dismutase (SOD), C-terminal domain
45	d1bm8a_	Alignment	not modelled	8.9	8	Fold: DNA-binding domain of Mlu1-box binding protein MBP1 Superfamily: DNA-binding domain of Mlu1-box binding protein MBP1 Family: DNA-binding domain of Mlu1-box binding protein MBP1
46	c3js4C_	Alignment	not modelled	8.8	14	PDB header: oxidoreductase Chain: C: PDB Molecule: superoxide dismutase; PDBTitle: crystal structure of iron superoxide dismutase from anaplasma2 phagocytophilum
47	d1zy3a1	Alignment	not modelled	8.8	9	Fold: Toxins' membrane translocation domains Superfamily: Bcl-2 inhibitors of programmed cell death Family: Bcl-2 inhibitors of programmed cell death
48	c2cw2B_	Alignment	not modelled	8.7	19	PDB header: oxidoreductase Chain: B: PDB Molecule: superoxide dismutase 1; PDBTitle: crystal structure of superoxide dismutase from p. marinus
49	c1qnnD_	Alignment	not modelled	8.6	14	PDB header: oxidoreductase Chain: D: PDB Molecule: superoxide dismutase; PDBTitle: cambialistic superoxide dismutase from porphyromonas2 gingivalis
50	c3rg9A_	Alignment	not modelled	8.5	33	PDB header: oxidoreductase/oxidoreductase inhibitor Chain: A: PDB Molecule: bifunctional dihydrofolate reductase-thymidylate synthase; PDBTitle: trypanosoma brucei dihydrofolate reductase (tdhfr) in complex with2 wr99210
51	d2q7ra1	Alignment	not modelled	8.4	10	Fold: MAPEG domain-like Superfamily: MAPEG domain-like Family: MAPEG domain
52	c1n0nB_	Alignment	not modelled	8.2	14	PDB header: oxidoreductase Chain: B: PDB Molecule: superoxide dismutase [mn]; PDBTitle: catalytic and structural effects of amino-acid substitution at his302 in human manganese superoxide dismutase
53	c3lj9A_	Alignment	not modelled	8.2	19	PDB header: oxidoreductase Chain: A: PDB Molecule: iron superoxide dismutase; PDBTitle: x-ray structure of the iron superoxide dismutase from2 pseudoalteromonas haloplanktis in complex with sodium azide
54	c2gpcB_	Alignment	not modelled	8.1	10	PDB header: oxidoreductase Chain: B: PDB Molecule: iron superoxide dismutase; PDBTitle: the crystal structure of the enzyme fe-superoxide dismutase2 from trypanosoma cruzi
						PDB header: hydrolase

55	c3l9aA	Alignment	not modelled	8.0	8	Chain: A: PDB Molecule: atp-dependent rna helicase dob1; PDBTitle: crystal structure of mtr4, a co-factor of the nuclear exosome
56	c3ceiA	Alignment	not modelled	8.0	14	PDB header: oxidoreductase Chain: A: PDB Molecule: superoxide dismutase; PDBTitle: crystal structure of superoxide dismutase from helicobacter2 pylori
57	c3kdpG	Alignment	not modelled	7.9	12	PDB header: hydrolase Chain: G: PDB Molecule: na+/k+ atpase gamma subunit transcript variant a; PDBTitle: crystal structure of the sodium-potassium pump
58	c3kdpH	Alignment	not modelled	7.9	12	PDB header: hydrolase Chain: H: PDB Molecule: na+/k+ atpase gamma subunit transcript variant a; PDBTitle: crystal structure of the sodium-potassium pump
59	c3tqjB	Alignment	not modelled	7.9	14	PDB header: oxidoreductase Chain: B: PDB Molecule: superoxide dismutase [fe]; PDBTitle: structure of the superoxide dismutase (fe) (sodb) from coxiella2 burnetii
60	c2a03A	Alignment	not modelled	7.8	5	PDB header: oxidoreductase Chain: A: PDB Molecule: fe-superoxide dismutase homolog; PDBTitle: superoxide dismutase protein from plasmodium berghei
61	c3nngA	Alignment	not modelled	7.8	3	PDB header: viral protein Chain: A: PDB Molecule: n-terminal domain of moloney murine leukemia virus PDBTitle: crystal structure of the n-terminal domain of moloney murine leukemia2 virus integrase, northeast structural genomics consortium target or3
62	c1p7gL	Alignment	not modelled	7.7	14	PDB header: oxidoreductase Chain: L: PDB Molecule: superoxide dismutase; PDBTitle: crystal structure of superoxide dismutase from pyrobaculum2 aerophilum
63	d1ma1a2	Alignment	not modelled	7.6	19	Fold: Fe,Mn superoxide dismutase (SOD), C-terminal domain Superfamily: Fe,Mn superoxide dismutase (SOD), C-terminal domain Family: Fe,Mn superoxide dismutase (SOD), C-terminal domain
64	c1gv3B	Alignment	not modelled	7.6	14	PDB header: manganese superoxide dismutase Chain: B: PDB Molecule: manganese superoxide dismutase; PDBTitle: the 2.0 angstrom resolution structure of the catalytic2 portion of a cyanobacterial membrane-bound manganese3 superoxide dismutase
65	d1y67a2	Alignment	not modelled	7.5	10	Fold: Fe,Mn superoxide dismutase (SOD), C-terminal domain Superfamily: Fe,Mn superoxide dismutase (SOD), C-terminal domain Family: Fe,Mn superoxide dismutase (SOD), C-terminal domain
66	d1b06a2	Alignment	not modelled	7.5	10	Fold: Fe,Mn superoxide dismutase (SOD), C-terminal domain Superfamily: Fe,Mn superoxide dismutase (SOD), C-terminal domain Family: Fe,Mn superoxide dismutase (SOD), C-terminal domain
67	c2rcvA	Alignment	not modelled	7.5	19	PDB header: oxidoreductase Chain: A: PDB Molecule: superoxide dismutase [mn]; PDBTitle: crystal structure of the bacillus subtilis superoxide2 dismutase
68	c2kncB	Alignment	not modelled	7.5	26	PDB header: cell adhesion Chain: B: PDB Molecule: integrin beta-3; PDBTitle: platelet integrin alfaib-beta3 transmembrane-cytoplasmic2 heterocomplex
69	c2y6xA	Alignment	not modelled	7.5	13	PDB header: photosynthesis Chain: A: PDB Molecule: photosystem ii 11 kd protein; PDBTitle: structure of psb27 from thermosynechococcus elongatus
70	c1unfX	Alignment	not modelled	7.5	24	PDB header: oxidoreductase Chain: X: PDB Molecule: iron superoxide dismutase; PDBTitle: the crystal structure of the eukaryotic fesod from vigna2 unguiculata suggests a new enzymatic mechanism
71	d1b1a	Alignment	not modelled	7.4	9	Fold: Toxins' membrane translocation domains Superfamily: Bcl-2 inhibitors of programmed cell death Family: Bcl-2 inhibitors of programmed cell death
72	c3prqT	Alignment	not modelled	7.3	18	PDB header: photosynthesis Chain: T: PDB Molecule: photosystem ii reaction center protein t; PDBTitle: crystal structure of cyanobacterial photosystem ii in complex with2 terbutryn (part 1 of 2). this file contains first monomer of psii3 dimer
73	c3bz1T	Alignment	not modelled	7.3	18	PDB header: electron transport Chain: T: PDB Molecule: photosystem ii reaction center protein t; PDBTitle: crystal structure of cyanobacterial photosystem ii (part 12 of 2). this file contains first monomer of psii dimer
74	c3bz2T	Alignment	not modelled	7.3	18	PDB header: electron transport Chain: T: PDB Molecule: photosystem ii reaction center protein t; PDBTitle: crystal structure of cyanobacterial photosystem ii (part 22 of 2). this file contains second monomer of psii dimer
75	c3prT	Alignment	not modelled	7.3	18	PDB header: photosynthesis Chain: T: PDB Molecule: photosystem ii reaction center protein t; PDBTitle: crystal structure of cyanobacterial photosystem ii in complex with2 terbutryn (part 2 of 2). this file contains second monomer of psii3 dimer
76	c3a0bT	Alignment	not modelled	7.3	15	PDB header: electron transport Chain: T: PDB Molecule: photosystem ii reaction center protein t; PDBTitle: crystal structure of br-substituted photosystem ii complex
77	c3arct	Alignment	not modelled	7.3	15	PDB header: electron transport, photosynthesis Chain: T: PDB Molecule: photosystem ii reaction center protein t; PDBTitle: crystal structure of oxygen-evolving photosystem ii at 1.9 angstrom2 resolution
78	c1dt0A	Alignment	not modelled	7.3	5	PDB header: oxidoreductase Chain: A: PDB Molecule: superoxide dismutase; PDBTitle: cloning, sequence, and crystallographic structure of2 recombinant iron superoxide dismutase from pseudomonas3 ovalis
79	c1en4C	Alignment	not modelled	7.3	14	PDB header: oxidoreductase Chain: C: PDB Molecule: manganese superoxide dismutase; PDBTitle: crystal structure analysis of the e. coli manganese2 superoxide dismutase q146h mutant

80	c1gn4B_	Alignment	not modelled	7.3	19	PDB header: oxidoreductase Chain: B: PDB Molecule: superoxide dismutase; PDBTitle: h145e mutant of mycobacterium tuberculosis iron-superoxide2 dismutase.
81	c1s5lT_	Alignment	not modelled	7.2	18	PDB header: photosynthesis Chain: T: PDB Molecule: photosystem ii psbt protein; PDBTitle: architecture of the photosynthetic oxygen evolving center
82	c1s5lt_	Alignment	not modelled	7.2	18	PDB header: photosynthesis Chain: T: PDB Molecule: photosystem ii psbt protein; PDBTitle: architecture of the photosynthetic oxygen evolving center
83	c2cw3A_	Alignment	not modelled	7.2	19	PDB header: oxidoreductase Chain: A: PDB Molecule: iron superoxide dismutase; PDBTitle: x-ray structure of pmsod2, superoxide dismutase from2 perkinsus marinus
84	c1sseB_	Alignment	not modelled	7.2	11	PDB header: transcription activator Chain: B: PDB Molecule: ap-1 like transcription factor yap1; PDBTitle: solution structure of the oxidized form of the yap1 redox2 domain
85	dluera2	Alignment	not modelled	7.2	14	Fold: Fe,Mn superoxide dismutase (SOD), C-terminal domain Superfamily: Fe,Mn superoxide dismutase (SOD), C-terminal domain Family: Fe,Mn superoxide dismutase (SOD), C-terminal domain
86	d2axttl_	Alignment	not modelled	7.2	18	Fold: Single transmembrane helix Superfamily: Photosystem II reaction center protein T, PsbT Family: PsbT-like
87	c3a0bt_	Alignment	not modelled	7.2	18	PDB header: electron transport Chain: T: PDB Molecule: photosystem ii reaction center protein t; PDBTitle: crystal structure of br-substituted photosystem ii complex
88	c2axtT_	Alignment	not modelled	7.2	18	PDB header: electron transport Chain: T: PDB Molecule: photosystem ii reaction center t protein; PDBTitle: crystal structure of photosystem ii from thermosynechococcus elongatus
89	c2axtt_	Alignment	not modelled	7.2	18	PDB header: electron transport Chain: T: PDB Molecule: photosystem ii reaction center t protein; PDBTitle: crystal structure of photosystem ii from thermosynechococcus elongatus
90	c3arcT_	Alignment	not modelled	7.2	18	PDB header: electron transport, photosynthesis Chain: T: PDB Molecule: photosystem ii reaction center protein t; PDBTitle: crystal structure of oxygen-evolving photosystem ii at 1.9 angstrom2 resolution
91	c3a0ht_	Alignment	not modelled	7.2	18	PDB header: electron transport Chain: T: PDB Molecule: photosystem ii reaction center protein t; PDBTitle: crystal structure of i-substituted photosystem ii complex
92	c3kziT_	Alignment	not modelled	7.2	18	PDB header: electron transport Chain: T: PDB Molecule: photosystem ii reaction center protein t; PDBTitle: crystal structure of monomeric form of cyanobacterial photosystem ii
93	c3a0hT_	Alignment	not modelled	7.2	18	PDB header: electron transport Chain: T: PDB Molecule: photosystem ii reaction center protein t; PDBTitle: crystal structure of i-substituted photosystem ii complex
94	dlp7ga2	Alignment	not modelled	7.1	14	Fold: Fe,Mn superoxide dismutase (SOD), C-terminal domain Superfamily: Fe,Mn superoxide dismutase (SOD), C-terminal domain Family: Fe,Mn superoxide dismutase (SOD), C-terminal domain
95	dljuva_	Alignment	not modelled	7.1	40	Fold: Dihydrofolate reductase-like Superfamily: Dihydrofolate reductase-like Family: Dihydrofolate reductases
96	dlpq1a_	Alignment	not modelled	7.0	9	Fold: Toxins' membrane translocation domains Superfamily: Bcl-2 inhibitors of programmed cell death Family: Bcl-2 inhibitors of programmed cell death
97	c2i88A_	Alignment	not modelled	7.0	14	PDB header: membrane protein Chain: A: PDB Molecule: colicin-e1; PDBTitle: crystal structure of the channel-forming domain of colicin2 e1
98	dlkkca2	Alignment	not modelled	6.9	10	Fold: Fe,Mn superoxide dismutase (SOD), C-terminal domain Superfamily: Fe,Mn superoxide dismutase (SOD), C-terminal domain Family: Fe,Mn superoxide dismutase (SOD), C-terminal domain
99	c3h1sB_	Alignment	not modelled	6.9	19	PDB header: oxidoreductase Chain: B: PDB Molecule: superoxide dismutase; PDBTitle: crystal structure of superoxide dismutase from francisella tularensis2 subsp. tularensis schu s4