

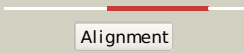



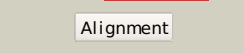


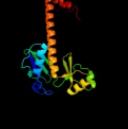
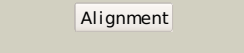



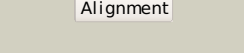



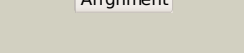

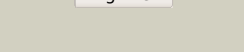






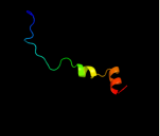





Phyre2

Email	l.a.kelley@imperial.ac.uk
Description	P76298
Date	Thu Jan 5 12:21:40 GMT 2012
Unique Job ID	c6d306720198cc3f

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c3a5iB_	 Alignment		100.0	96	PDB header: protein transport Chain: B: PDB Molecule: flagellar biosynthesis protein flha; PDBTitle: structure of the cytoplasmic domain of flha
2	c3mydA_	 Alignment		100.0	38	PDB header: protein transport Chain: A: PDB Molecule: flagellar biosynthesis protein flha; PDBTitle: structure of the cytoplasmic domain of flha from helicobacter pylori
3	c2x49A_	 Alignment		100.0	22	PDB header: protein transport Chain: A: PDB Molecule: invasion protein inva; PDBTitle: crystal structure of the c-terminal domain of inva
4	c3mixA_	 Alignment		100.0	36	PDB header: protein transport Chain: A: PDB Molecule: flagellar biosynthesis protein flha; PDBTitle: crystal structure of the cytosolic domain of b. subtilis flha
5	c3lw9B_	 Alignment		100.0	18	PDB header: protein transport Chain: B: PDB Molecule: invasion protein inva; PDBTitle: structure of a cytoplasmic domain of salmonella inva
6	c1ny5A_	 Alignment		48.4	14	PDB header: transcription Chain: A: PDB Molecule: transcriptional regulator (ntrc family); PDBTitle: crystal structure of sigm54 activator (aaa+ atpase) in the inactive2 state
7	d1lm5a_	 Alignment		47.8	18	Fold: beta-hairpin-alpha-hairpin repeat Superfamily: Plakin repeat Family: Plakin repeat
8	c3gz6A_	 Alignment		41.5	18	PDB header: dna binding protein/dna Chain: A: PDB Molecule: mutt/nudix family protein; PDBTitle: crystal structure of shewanella oneidensis ntrr complexed2 with a 27mer dna
9	c2jobA_	 Alignment		39.9	38	PDB header: lipid binding protein Chain: A: PDB Molecule: antilipopolysaccharide factor; PDBTitle: solution structure of an antilipopolysaccharide factor from2 shrimp and its possible lipid a binding site
10	d1ovma1	 Alignment		37.8	12	Fold: DHS-like NAD/FAD-binding domain Superfamily: DHS-like NAD/FAD-binding domain Family: Pyruvate oxidase and decarboxylase, middle domain
11	d1wi9a_	 Alignment		37.2	24	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: PCI domain (PINT motif)

12	c3mtuD_	Alignment		32.8	23	PDB header: contractile protein Chain: D: PDB Molecule: tropomyosin alpha-1 chain, microtubule-associated protein PDBTitle: structure of the tropomyosin overlap complex from chicken smooth2 muscle
13	c3t6kB_	Alignment		29.0	22	PDB header: signaling protein Chain: B: PDB Molecule: response regulator receiver; PDBTitle: crystal structure of a hypothetical response regulator (caur_3799)2 from chloroflexus aurantiacus j-10-fl at 1.86 a resolution
14	d1zh2a1	Alignment		29.0	18	Fold: Flavodoxin-like Superfamily: CheY-like Family: CheY-related
15	d1jhna4	Alignment		27.2	16	Fold: Concanavalin A-like lectins/glucanases Superfamily: Concanavalin A-like lectins/glucanases Family: Calnexin/calreticulin
16	d2h9fa2	Alignment		23.2	24	Fold: Diaminopimelate epimerase-like Superfamily: Diaminopimelate epimerase-like Family: PA0793-like
17	c1b35D_	Alignment		23.0	22	PDB header: virus Chain: D: PDB Molecule: protein (cricket paralysis virus, vp4); PDBTitle: cricket paralysis virus (crpv)
18	c3cfyA_	Alignment		22.3	18	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: putative luxo repressor protein; PDBTitle: crystal structure of signal receiver domain of putative luxo2 repressor protein from vibrio parahaemolyticus
19	d2fswa1	Alignment		21.4	17	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: HxIR-like
20	c1lijA_	Alignment		21.0	38	PDB header: signaling protein Chain: A: PDB Molecule: erbB-2 receptor protein-tyrosine kinase; PDBTitle: solution structure of the neu/erbB-2 membrane spanning2 segment
21	c3kmgE_	Alignment	not modelled	20.8	50	PDB header: transcription Chain: E: PDB Molecule: steroid receptor coactivator-1; PDBTitle: the x-ray crystal structure of ppar-gamma in complex with an indole2 derivative modulator, gsk538, and an src-1 peptide
22	c2q2kA_	Alignment	not modelled	20.1	34	PDB header: dna binding protein/dna Chain: A: PDB Molecule: hypothetical protein; PDBTitle: structure of nucleic-acid binding protein
23	c2rjnA_	Alignment	not modelled	19.3	12	PDB header: hydrolase Chain: A: PDB Molecule: response regulator receiver:metal-dependent PDBTitle: crystal structure of an uncharacterized protein q2bku2 from2 neptuniibacter caesariensis
24	c2zwmA_	Alignment	not modelled	19.0	19	PDB header: transcription Chain: A: PDB Molecule: transcriptional regulatory protein yycf; PDBTitle: crystal structure of yycf receiver domain from bacillus2 subtilis
25	c2dd4H_	Alignment	not modelled	18.4	26	PDB header: hydrolase Chain: H: PDB Molecule: thiocyanate hydrolase beta subunit; PDBTitle: thiocyanate hydrolase (scnase) from thiobacillus thiooparus2 recombinant apo-enzyme
26	c2cdqB_	Alignment	not modelled	17.6	13	PDB header: transferase Chain: B: PDB Molecule: aspartokinase; PDBTitle: crystal structure of arabidopsis thaliana aspartate kinase2 complexed with lysine and s-adenosylmethionine
27	c4a5mH_	Alignment	not modelled	17.4	20	PDB header: transcription Chain: H: PDB Molecule: uncharacterized hth-type transcriptional regulator yybr; PDBTitle: redox regulator hypr in its oxidized form
28	d1qhma_	Alignment	not modelled	17.1	50	Fold: PFL-like glycol radical enzymes Superfamily: PFL-like glycol radical enzymes Family: PFL-like
						PDB header: apoptosis

29	c2o2fA_	Alignment	not modelled	17.1	16	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
30	c2yhsA_	Alignment	not modelled	16.6	15	PDB header: cell cycle Chain: A: PDB Molecule: cell division protein ftsy; PDBTitle: structure of the e. coli srp receptor ftsy
31	dlzgza1	Alignment	not modelled	16.3	15	Fold: Flavodoxin-like Superfamily: CheY-like Family: CheY-related
32	c3dnfB_	Alignment	not modelled	16.0	17	PDB header: oxidoreductase Chain: B: PDB Molecule: 4-hydroxy-3-methylbut-2-enyl diphosphate reductase; PDBTitle: structure of (e)-4-hydroxy-3-methyl-but-2-enyl diphosphate reductase,2 the terminal enzyme of the non-mevalonate pathway
33	c2lkyA_	Alignment	not modelled	15.2	16	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: solution structure of msme_1053, the second duf3349 annotated protein2 in the genome of mycobacterium smegmatis, seattle structural genomics3 center for infectious disease target mysm.17112.b
34	c3rg0A_	Alignment	not modelled	15.1	24	PDB header: chaperone Chain: A: PDB Molecule: calreticulin; PDBTitle: structural and functional relationships between the lectin and arm2 domains of calreticulin
35	c1vj7B_	Alignment	not modelled	14.9	17	PDB header: hydrolase, transferase Chain: B: PDB Molecule: bifunctional rela/spot; PDBTitle: crystal structure of the bifunctional catalytic fragment of relseq,2 the rela/spot homolog from streptococcus equisimilis.
36	c2lbgA_	Alignment	not modelled	14.9	56	PDB header: membrane protein Chain: A: PDB Molecule: major prion protein; PDBTitle: structure of the chr of the prion protein in dpc micelles
37	c2oviA_	Alignment	not modelled	14.5	21	PDB header: ligand binding protein, metal transport Chain: A: PDB Molecule: hypothetical protein chux; PDBTitle: structure of the heme binding protein chux
38	c2hfpB_	Alignment	not modelled	14.5	54	PDB header: transcription Chain: B: PDB Molecule: src peptide fragment; PDBTitle: crystal structure of ppar gamma with n-sulfonyl-2-indole2 carboxamide ligands
39	c1fm9E_	Alignment	not modelled	14.3	54	PDB header: transcription Chain: E: PDB Molecule: steroid receptor coactivator; PDBTitle: the 2.1 angstrom resolution crystal structure of the2 heterodimer of the human rxralpha and ppargamma ligand3 binding domains respectively bound with 9-cis retinoic4 acid and gi262570 and co-activator peptides.
40	c1fm6E_	Alignment	not modelled	14.3	54	PDB header: transcription Chain: E: PDB Molecule: steroid receptor coactivator; PDBTitle: the 2.1 angstrom resolution crystal structure of the2 heterodimer of the human rxralpha and ppargamma ligand3 binding domains respectively bound with 9-cis retinoic4 acid and rosiglitazone and co-activator peptides.
41	c1k74E_	Alignment	not modelled	14.3	54	PDB header: transcription Chain: E: PDB Molecule: steroid receptor coactivator; PDBTitle: the 2.3 angstrom resolution crystal structure of the2 heterodimer of the human ppargamma and rxralpha ligand3 binding domains respectively bound with gw409544 and 9-cis4 retinoic acid and co-activator peptides.
42	dlh16a_	Alignment	not modelled	14.2	50	Fold: PFL-like glycol radical enzymes Superfamily: PFL-like glycol radical enzymes Family: PFL-like
43	c3ke8A_	Alignment	not modelled	14.1	17	PDB header: oxidoreductase Chain: A: PDB Molecule: 4-hydroxy-3-methylbut-2-enyl diphosphate PDBTitle: crystal structure of isph:hmbpp-complex
44	c1fm6V_	Alignment	not modelled	14.0	54	PDB header: transcription Chain: V: PDB Molecule: steroid receptor coactivator; PDBTitle: the 2.1 angstrom resolution crystal structure of the2 heterodimer of the human rxralpha and ppargamma ligand3 binding domains respectively bound with 9-cis retinoic4 acid and rosiglitazone and co-activator peptides.
45	c3hjlA_	Alignment	not modelled	13.7	14	PDB header: proton transport Chain: A: PDB Molecule: flagellar motor switch protein flig; PDBTitle: the structure of full-length flig from aquifex aeolicus
46	d2fb1a1	Alignment	not modelled	13.4	24	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Nudix-associated domain
47	c1jscA_	Alignment	not modelled	13.2	16	PDB header: lyase Chain: A: PDB Molecule: acetoxyhydroxy-acid synthase; PDBTitle: crystal structure of the catalytic subunit of yeast2 acetoxyhydroxyacid synthase: a target for herbicidal3 inhibitors
48	dlpvda1	Alignment	not modelled	13.2	12	Fold: DHS-like NAD/FAD-binding domain Superfamily: DHS-like NAD/FAD-binding domain Family: Pyruvate oxidase and decarboxylase, middle domain
49	c1p8dC_	Alignment	not modelled	13.1	50	PDB header: membrane protein/protein binding Chain: C: PDB Molecule: nuclear receptor coactivator 1 isoform 3; PDBTitle: x-ray crystal structure of lxr ligand binding domain with 24(s),25-2 epoxycholesterol
50	d2f2ea1	Alignment	not modelled	13.0	16	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Hxlr-like
51	c2cu5C_	Alignment	not modelled	12.9	21	PDB header: structural genomics, unknown function Chain: C: PDB Molecule: conserved hypothetical protein tt1486; PDBTitle: crystal structure of the conserved hypothetical protein tt1486 from2 thermus thermophilus hb8
52	dlzpdal	Alignment	not modelled	12.4	15	Fold: DHS-like NAD/FAD-binding domain Superfamily: DHS-like NAD/FAD-binding domain

						Family: Pyruvate oxidase and decarboxylase, middle domain
53	c2qzjC_	Alignment	not modelled	12.3	8	PDB header: transcription Chain: C: PDB Molecule: two-component response regulator; PDBTitle: crystal structure of a two-component response regulator from2 clostridium difficile
54	c2peoA_	Alignment	not modelled	12.3	16	PDB header: chaperone Chain: A: PDB Molecule: rbcx protein; PDBTitle: crystal structure of rbcx from anabaena ca
55	d2peoa1	Alignment	not modelled	12.3	16	Fold: RbcX-like Superfamily: RbcX-like Family: RbcX-like
56	d1rh5a_	Alignment	not modelled	12.1	20	Fold: Preprotein translocase SecY subunit Superfamily: Preprotein translocase SecY subunit Family: Preprotein translocase SecY subunit
57	c3s93B_	Alignment	not modelled	12.0	16	PDB header: transcription Chain: B: PDB Molecule: tudor domain-containing protein 5; PDBTitle: crystal structure of conserved motif in tdrd5
58	d1a68a_	Alignment	not modelled	11.8	25	Fold: POZ domain Superfamily: POZ domain Family: Tetramerization domain of potassium channels
59	c1mhsA_	Alignment	not modelled	11.3	24	PDB header: membrane protein, proton transport Chain: A: PDB Molecule: plasma membrane atpase; PDBTitle: model of neurospora crassa proton atpase
60	c1nw3A_	Alignment	not modelled	11.2	23	PDB header: transferase Chain: A: PDB Molecule: histone methyltransferase dot1l; PDBTitle: structure of the catalytic domain of human dot1l, a non-set2 domain nucleosomal histone methyltransferase
61	d1nw3a_	Alignment	not modelled	11.2	23	Fold: S-adenosyl-L-methionine-dependent methyltransferases Superfamily: S-adenosyl-L-methionine-dependent methyltransferases Family: Catalytic, N-terminal domain of histone methyltransferase Dot1l
62	c2kvcA_	Alignment	not modelled	11.2	12	PDB header: unknown function Chain: A: PDB Molecule: putative uncharacterized protein; PDBTitle: solution structure of the mycobacterium tuberculosis protein rv0543c,2 a member of the duf3349 superfamily. seattle structural genomics3 center for infectious disease target mytud.17112.a
63	d1ugpa_	Alignment	not modelled	11.2	29	Fold: Nitrile hydratase alpha chain Superfamily: Nitrile hydratase alpha chain Family: Nitrile hydratase alpha chain
64	c2prgC_	Alignment	not modelled	11.1	54	PDB header: complex (thiazolidinedione/receptor) Chain: C: PDB Molecule: nuclear receptor coactivator src-1; PDBTitle: ligand-binding domain of the human peroxisome proliferator2 activated receptor gamma
65	d1xfaf1	Alignment	not modelled	10.7	15	Fold: Flavodoxin-like Superfamily: CheY-like Family: CheY-related
66	c3ktsA_	Alignment	not modelled	10.6	20	PDB header: transcriptional regulator Chain: A: PDB Molecule: glycerol uptake operon antiterminator regulatory protein; PDBTitle: crystal structure of glycerol uptake operon antiterminator regulatory2 protein from listeria monocytogenes str. 4b f2365
67	c2c9eA_	Alignment	not modelled	10.6	18	PDB header: photosynthesis Chain: A: PDB Molecule: peridinin-chlorophyll a protein; PDBTitle: peridinin-chlorophyll a protein, high-salt form
68	d1niga_	Alignment	not modelled	10.5	23	Fold: Ferritin-like Superfamily: Cobalamin adenosyltransferase-like Family: Hypothetical protein Ta1238
69	c2z99A_	Alignment	not modelled	10.3	19	PDB header: cell cycle Chain: A: PDB Molecule: putative uncharacterized protein; PDBTitle: crystal structure of scpb from mycobacterium tuberculosis
70	d1y8oa1	Alignment	not modelled	10.2	17	Fold: Bromodomain-like Superfamily: alpha-ketoacid dehydrogenase kinase, N-terminal domain Family: alpha-ketoacid dehydrogenase kinase, N-terminal domain
71	c3cgxA_	Alignment	not modelled	10.2	13	PDB header: transferase Chain: A: PDB Molecule: putative nucleotide-diphospho-sugar transferase; PDBTitle: crystal structure of putative nucleotide-diphospho-sugar transferase2 (yp_389115.1) from desulfovibrio desulfuricans g20 at 1.90 a3 resolution
72	c2qr3A_	Alignment	not modelled	10.2	15	PDB header: transcription Chain: A: PDB Molecule: two-component system response regulator; PDBTitle: crystal structure of the n-terminal signal receiver domain of two-2 component system response regulator from bacteroides fragilis
73	c1pjtb_	Alignment	not modelled	10.0	11	PDB header: transferase/oxidoreductase/lyase Chain: B: PDB Molecule: siroheme synthase; PDBTitle: the structure of the ser128ala point-mutant variant of cysg,2 the multifunctional3 methyltransferase/dehydrogenase/ferrochelatase for4 siroheme synthesis
74	d1d8ba_	Alignment	not modelled	9.9	23	Fold: SAM domain-like Superfamily: HRDC-like Family: HRDC domain from helicases
75	c3df8A_	Alignment	not modelled	9.9	24	PDB header: transcription Chain: A: PDB Molecule: possible hxlr family transcriptional factor; PDBTitle: the crystal structure of a possible hxlr family transcriptional factor2 from thermoplasma volcanium gss1
76	c6naxA_	Alignment	not modelled	9.8	20	PDB header: gene regulation/dna Chain: A: PDB Molecule: homeobox protein pax-6;

76	c0pdaA_	Alignment	not modelled	9.8	49	PDBTitle: crystal structure of the human pax-6 paired domain-dna2 complex reveals a general model for pax protein-dna3 interactions
77	c2q9qF_	Alignment	not modelled	9.8	16	PDB header: replication Chain: F: PDB Molecule: gins complex subunit 4; PDBTitle: the crystal structure of full length human gins complex
78	d1qkka_	Alignment	not modelled	9.7	8	Fold: Flavodoxin-like Superfamily: CheY-like Family: CheY-related
79	d1dsxa_	Alignment	not modelled	9.7	27	Fold: POZ domain Superfamily: POZ domain Family: Tetramerization domain of potassium channels
80	d1orna_	Alignment	not modelled	9.7	17	Fold: DNA-glycosylase Superfamily: DNA-glycosylase Family: Endonuclease III
81	d1b0na1	Alignment	not modelled	9.4	38	Fold: Dimerisation interlock Superfamily: SinR repressor dimerisation domain-like Family: SinR repressor dimerisation domain-like
82	d1wfra_	Alignment	not modelled	9.3	27	Fold: SCP-like Superfamily: SCP-like Family: Sterol carrier protein, SCP
83	c2ph0A_	Alignment	not modelled	9.2	17	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of the q6d2t7_erwct protein from erwinia2 carotovora. nesg target ewr41.
84	c1cpbA_	Alignment	not modelled	9.1	24	PDB header: hydrolase (c-terminal peptidase) Chain: A: PDB Molecule: carboxypeptidase b; PDBTitle: structure of carboxypeptidase b at 2.8 angstroms resolution
85	d1iuka_	Alignment	not modelled	9.0	19	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: CoA-binding domain
86	c2f3oB_	Alignment	not modelled	8.9	25	PDB header: unknown function Chain: B: PDB Molecule: pyruvate formate-lyase 2; PDBTitle: crystal structure of a glycyl radical enzyme from archaeoglobus2 fulgidus
87	d1ni5a1	Alignment	not modelled	8.9	15	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Adenine nucleotide alpha hydrolases-like Family: PP-loop ATPase
88	c3hv2B_	Alignment	not modelled	8.9	17	PDB header: signaling protein Chain: B: PDB Molecule: response regulator/hd domain protein; PDBTitle: crystal structure of signal receiver domain of hd domain-2 containing protein from pseudomonas fluorescens pf-5
89	c3dzdA_	Alignment	not modelled	8.9	8	PDB header: transcription regulator Chain: A: PDB Molecule: transcriptional regulator (ntrc family); PDBTitle: crystal structure of sigma54 activator ntrc4 in the inactive2 state
90	c4ktqA_	Alignment	not modelled	8.8	25	PDB header: transferase/dna Chain: A: PDB Molecule: protein (large fragment of dna polymerase i); PDBTitle: binary complex of the large fragment of dna polymerase i2 from t. aquaticus bound to a primer/template dna
91	c1p8dD_	Alignment	not modelled	8.7	55	PDB header: membrane protein/protein binding Chain: D: PDB Molecule: nuclear receptor coactivator 1 isoform 3; PDBTitle: x-ray crystal structure of lxr ligand binding domain with 24(s),25-2 epoxysterol
92	d2cdqa1	Alignment	not modelled	8.6	13	Fold: Carbamate kinase-like Superfamily: Carbamate kinase-like Family: PyrH-like
93	c2pw0A_	Alignment	not modelled	8.6	24	PDB header: unknown function Chain: A: PDB Molecule: prpf methylaconitate isomerase; PDBTitle: crystal structure of trans-aconitate bound to methylaconitate2 isomerase prpf from shewanella oneidensis
94	c3r0jA_	Alignment	not modelled	8.5	22	PDB header: dna binding protein Chain: A: PDB Molecule: possible two component system response transcriptional PDBTitle: structure of phop from mycobacterium tuberculosis
95	d1ckqa_	Alignment	not modelled	8.5	15	Fold: Restriction endonuclease-like Superfamily: Restriction endonuclease-like Family: Restriction endonuclease EcoRI
96	c1k7ID_	Alignment	not modelled	8.4	55	PDB header: transcription Chain: D: PDB Molecule: steroid receptor coactivator; PDBTitle: the 2.5 angstrom resolution crystal structure of the human2 pparalpha ligand binding domain bound with gw409544 and a3 co-activator peptide.
97	c1k7IB_	Alignment	not modelled	8.4	55	PDB header: transcription Chain: B: PDB Molecule: steroid receptor coactivator; PDBTitle: the 2.5 angstrom resolution crystal structure of the human2 pparalpha ligand binding domain bound with gw409544 and a3 co-activator peptide.
98	c1k7IF_	Alignment	not modelled	8.4	55	PDB header: transcription Chain: F: PDB Molecule: steroid receptor coactivator; PDBTitle: the 2.5 angstrom resolution crystal structure of the human2 pparalpha ligand binding domain bound with gw409544 and a3 co-activator peptide.
99	c1k7IH_	Alignment	not modelled	8.4	55	PDB header: transcription Chain: H: PDB Molecule: steroid receptor coactivator; PDBTitle: the 2.5 angstrom resolution crystal structure of the human2 pparalpha ligand binding domain bound with gw409544 and a3 co-activator peptide.