

Phyre²

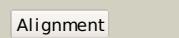
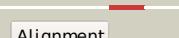
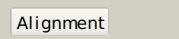
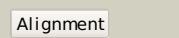
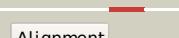
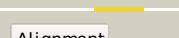
Email	I.a.kelley@imperial.ac.uk
Description	P27896
Date	Wed Jan 25 15:20:46 GMT 2012
Unique Job ID	414ef1f881fad2a2

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c2c2aA_			100.0	17	PDB header: transferase Chain: A: PDB Molecule: sensor histidine kinase; PDBTitle: structure of the entire cytoplasmic portion of a sensor histidine kinase protein
2	c3d2rB_			100.0	17	PDB header: transferase Chain: B: PDB Molecule: [pyruvate dehydrogenase [lipoamide]] kinase isozyme 4; PDBTitle: crystal structure of pyruvate dehydrogenase kinase isozyme 4 in2 complex with adp
3	c1gjvA_			100.0	17	PDB header: transferase Chain: A: PDB Molecule: [3-methyl-2-oxobutanoate dehydrogenase PDBTitle: branched-chain alpha-ketoacid dehydrogenase kinase (bck)2 complexed with atp-gamma-s
4	c3d36B_			100.0	18	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
5	c2q8fA_			100.0	16	PDB header: transferase Chain: A: PDB Molecule: [pyruvate dehydrogenase [lipoamide]] kinase isozyme 1; PDBTitle: structure of pyruvate dehydrogenase kinase isoform 1
6	c2bu8A_			100.0	14	PDB header: transferase Chain: A: PDB Molecule: pyruvate dehydrogenase kinase isoenzyme 2; PDBTitle: crystal structures of human pyruvate dehydrogenase kinase 22 containing physiological and synthetic ligands
7	c1y8oA_			100.0	13	PDB header: transferase Chain: A: PDB Molecule: [pyruvate dehydrogenase [lipoamide]] kinase isozyme 3; PDBTitle: crystal structure of the pdk3-l2 complex
8	c1b3qA_			99.9	18	PDB header: transferase Chain: A: PDB Molecule: protein (chemotaxis protein chea); PDBTitle: crystal structure of chea-289, a signal transducing histidine kinase
9	c3a0rA_			99.9	12	PDB header: transferase Chain: A: PDB Molecule: sensor protein; PDBTitle: crystal structure of histidine kinase thka (tm1359) in complex with2 response regulator protein tra (tm1360)
10	c2ch4A_			99.9	23	PDB header: transferase/chemotaxis Chain: A: PDB Molecule: chemotaxis protein chea; PDBTitle: complex between bacterial chemotaxis histidine kinase chea2 domains p4 and p5 and receptor-adaptor protein chew
11	d2c2aa2			99.9	17	Fold: ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase Superfamily: ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase Family: Histidine kinase

12	d1gkza_			99.9	23	Fold: ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase Superfamily: ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase Family: alpha-ketoacid dehydrogenase kinase, C-terminal domain
13	d1jm6a2			99.9	20	Fold: ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase Superfamily: ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase Family: alpha-ketoacid dehydrogenase kinase, C-terminal domain
14	d1ysral			99.9	20	Fold: ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase Superfamily: ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase Family: Histidine kinase
15	d1id0a_			99.9	17	Fold: ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase Superfamily: ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase Family: Histidine kinase
16	d1i58a_			99.9	23	Fold: ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase Superfamily: ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase Family: Histidine kinase
17	d1bxda_			99.9	18	Fold: ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase Superfamily: ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase Family: Histidine kinase
18	c3gieA_			99.9	21	PDB header: transferase Chain: A: PDB Molecule: sensor histidine kinase desk; PDBTitle: crystal structure of deskc_h188e in complex with amppcp
19	c3a0tA_			99.9	15	PDB header: transferase Chain: A: PDB Molecule: sensor protein; PDBTitle: catalytic domain of histidine kinase thka (tm1359) in2 complex with adp and mg ion (trigonal)
20	c3jz3B_			99.9	23	PDB header: transferase Chain: B: PDB Molecule: sensor protein qsec; PDBTitle: structure of the cytoplasmic segment of histidine kinase qsec
21	c3ehgA_		not modelled	99.8	22	PDB header: transferase Chain: A: PDB Molecule: sensor kinase (yocf protein); PDBTitle: crystal structure of the atp-binding domain of desk in complex with2 atp PDB header: transferase Chain: A: PDB Molecule: hypoxia sensor histidine kinase response regulator dosr
22	c3zxqA_		not modelled	99.8	30	PDB header: transferase Chain: A: PDB Molecule: hypoxia sensor histidine kinase response regulator dosr PDBTitle: crystal structure of the atp-binding domain of mycobacterium2 tuberculosis dosr PDB header: transferase Chain: B: PDB Molecule: redox sensor histidine kinase response regulator devb;
23	c3xzoB_		not modelled	99.8	27	PDB header: transferase Chain: B: PDB Molecule: redox sensor histidine kinase response regulator devb; PDBTitle: crystal structure of the mutant atp-binding domain of2 mycobacterium tuberculosis dosr
24	d1r62a_		not modelled	99.7	15	Fold: ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase Superfamily: ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase Family: Histidine kinase
25	d2hkja3		not modelled	99.6	15	Fold: ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase Superfamily: ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase Family: DNA gyrase/MutL, N-terminal domain
26	d1th8a_		not modelled	99.5	22	Fold: ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase Superfamily: ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase Family: Histidine kinase
27	c2zbkb_		not modelled	99.5	16	PDB header: isomerase Chain: B: PDB Molecule: type 2 dna topoisomerase 6 subunit b; PDBTitle: crystal structure of an intact type ii dna topoisomerase:2 insights into dna transfer mechanisms

28	c1mx0D	Alignment	not modelled	99.4	16	PDB header: isomerase Chain: D; PDB Molecule: type ii dna topoisomerase vi subunit b; PDBTitle: structure of topoisomerase subunit
29	c2q2eB	Alignment	not modelled	99.4	23	PDB header: isomerase Chain: B; PDB Molecule: type 2 dna topoisomerase 6 subunit b; PDBTitle: crystal structure of the topoisomerase vi holoenzyme from 2 methanoscincina mazaei
30	d1ixma	Alignment	not modelled	99.3	13	Fold: Sporulation response regulatory protein SpoOB Superfamily: Sporulation response regulatory protein SpoOB Family: Sporulation response regulatory protein SpoOB
31	d1h7sa2	Alignment	not modelled	99.3	21	Fold: ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase Superfamily: ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase Family: DNA gyrase/MutL, N-terminal domain
32	d1bkna2	Alignment	not modelled	99.0	22	Fold: ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase Superfamily: ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase Family: DNA gyrase/MutL, N-terminal domain
33	d1y8oa2	Alignment	not modelled	98.9	13	Fold: ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase Superfamily: ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase Family: alpha-ketoacid dehydrogenase kinase, C-terminal domain
34	d1b63a2	Alignment	not modelled	98.9	22	Fold: ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase Superfamily: ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase Family: DNA gyrase/MutL, N-terminal domain
35	c3na3A	Alignment	not modelled	98.5	24	PDB header: protein binding Chain: A; PDB Molecule: dna mismatch repair protein mlh1; PDBTitle: mutl protein homolog 1 isoform 1 from homo sapiens
36	c3h4IB	Alignment	not modelled	98.5	27	PDB header: dna binding protein, protein binding Chain: B; PDB Molecule: dna mismatch repair protein pms1; PDBTitle: crystal structure of n terminal domain of a dna repair protein
37	c1ea6A	Alignment	not modelled	98.4	23	PDB header: dna repair Chain: A; PDB Molecule: pms1 protein homolog 2; PDBTitle: n-terminal 40kda fragment of nhpms2 complexed with adp
38	c1bknA	Alignment	not modelled	98.3	27	PDB header: dna repair Chain: A; PDB Molecule: mutl; PDBTitle: crystal structure of an n-terminal 40kd fragment of e. coli2 dna mismatch repair protein mutl
39	d1kija2	Alignment	not modelled	98.2	32	Fold: ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase Superfamily: ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase Family: DNA gyrase/MutL, N-terminal domain
40	c3ke6A	Alignment	not modelled	98.2	31	PDB header: unknown function Chain: A; PDB Molecule: protein rv1364c/mt1410; PDBTitle: the crystal structure of the rsbu and rswb domains of rv1364c from2 mycobacterium tuberculosis
41	c1kijB	Alignment	not modelled	98.1	38	PDB header: isomerase Chain: B; PDB Molecule: dna gyrase subunit b; PDBTitle: crystal structure of the 43k atpase domain of thermus thermophilus2 gyrase b in complex with novobiocin
42	d1s16a2	Alignment	not modelled	98.1	18	Fold: ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase Superfamily: ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase Family: DNA gyrase/MutL, N-terminal domain
43	d1pvga2	Alignment	not modelled	98.1	24	Fold: ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase Superfamily: ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase Family: DNA gyrase/MutL, N-terminal domain
44	c1s16B	Alignment	not modelled	98.0	21	PDB header: isomerase Chain: B; PDB Molecule: topoisomerase iv subunit b; PDBTitle: crystal structure of e. coli topoisomerase iv pare 43kda subunit2 complexed with adpnp
45	c1y4sA	Alignment	not modelled	98.0	27	PDB header: chaperone Chain: A; PDB Molecule: chaperone protein htpg; PDBTitle: conformation rearrangement of heat shock protein 90 upon2 adp binding
46	c3g7bB	Alignment	not modelled	98.0	26	PDB header: isomerase Chain: B; PDB Molecule: dna gyrase subunit b; PDBTitle: staphylococcus aureus gyrase b co-complex with inhibitor
47	d1ei1a2	Alignment	not modelled	97.9	36	Fold: ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase Superfamily: ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase Family: DNA gyrase/MutL, N-terminal domain
48	c1ei1B	Alignment	not modelled	97.9	34	PDB header: isomerase Chain: B; PDB Molecule: dna gyrase b; PDBTitle: dimerization of e. coli dna gyrase b provides a structural mechanism2 for activating the atpase catalytic center
49	c2o1uA	Alignment	not modelled	97.9	19	PDB header: chaperone Chain: A; PDB Molecule: endoplasmic; PDBTitle: structure of full length grp94 with amp-pnp bound
50	d1s14a	Alignment	not modelled	97.9	20	Fold: ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase Superfamily: ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase Family: DNA gyrase/MutL, N-terminal domain
51	c3lnuA	Alignment	not modelled	97.8	27	PDB header: isomerase Chain: A; PDB Molecule: topoisomerase iv subunit b; PDBTitle: crystal structure of pare subunit

52	c3pehB_		not modelled	97.8	23	PDB header: chaperone Chain: B: PDB Molecule: endoplasmic reticulum protein hsp90 from plasmodium2 falciparum, pf1070c in the presence of a thienopyrimidine derivative
53	c2cg9A_		not modelled	97.8	27	PDB header: chaperone Chain: A: PDB Molecule: atp-dependent molecular chaperone hsp82; PDBTitle: crystal structure of an hsp90-sba1 closed chaperone complex
54	d1uyma_		not modelled	97.8	25	Fold: ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase Superfamily: ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase Family: Heat shock protein 90, HSP90, N-terminal domain
55	c3eziB_			97.8	28	PDB header: transferase Chain: B: PDB Molecule: nitrate/nitrite sensor protein narx; PDBTitle: crystal structure of the e. coli histidine kinase narx2 sensor domain without ligand
56	c1zxnB_		not modelled	97.7	30	PDB header: isomerase Chain: B: PDB Molecule: dna topoisomerase ii, alpha isozyme; PDBTitle: human dna topoisomerase ii a atpase/adp
57	c2iopD_		not modelled	97.7	25	PDB header: chaperone Chain: D: PDB Molecule: chaperone protein htpg; PDBTitle: crystal structure of full-length htpg, the escherichia coli2 hsp90, bound to adp
58	c1zwhA_		not modelled	97.7	26	PDB header: chaperone Chain: A: PDB Molecule: atp-dependent molecular chaperone hsp82; PDBTitle: yeast hsp82 in complex with the novel hsp90 inhibitor radester amine
59	d2iwxa1		not modelled	97.7	26	Fold: ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase Superfamily: ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase Family: Heat shock protein 90, HSP90, N-terminal domain
60	c1qzrA_		not modelled	97.6	28	PDB header: isomerase Chain: A: PDB Molecule: dna topoisomerase ii; PDBTitle: crystal structure of the atpase region of saccharomyces cerevisiae2 topoisomerase ii bound to icrf-187 (dexrazoxane)
61	d2c2aa1		not modelled	97.6	14	Fold: ROP-like Superfamily: Homodimeric domain of signal transducing histidine kinase Family: Homodimeric domain of signal transducing histidine kinase
62	c2fwyA_		not modelled	97.6	18	PDB header: chaperone Chain: A: PDB Molecule: heat shock protein hsp 90-alpha; PDBTitle: structure of human hsp90-alpha bound to the potent water2 soluble inhibitor pu-h64
63	d1uya_		not modelled	97.5	18	Fold: ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase Superfamily: ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase Family: Heat shock protein 90, HSP90, N-terminal domain
64	c2akpA_		not modelled	97.4	19	PDB header: chaperone Chain: A: PDB Molecule: atp-dependent molecular chaperone hsp82; PDBTitle: hsp90 delta24-n210 mutant
65	c3iedA_		not modelled	97.2	25	PDB header: chaperone Chain: A: PDB Molecule: heat shock protein; PDBTitle: crystal structure of n-terminal domain of plasmodium falciparum hsp902 (pf14_0417) in complex with amppn
66	d1joya_		not modelled	97.1	10	Fold: ROP-like Superfamily: Homodimeric domain of signal transducing histidine kinase Family: Homodimeric domain of signal transducing histidine kinase
67	c2iorA_		not modelled	97.0	30	PDB header: chaperone Chain: A: PDB Molecule: chaperone protein htpg; PDBTitle: crystal structure of the n-terminal domain of htpg, the2 escherichia coli hsp90, bound to adp
68	d1gy5a_		not modelled	97.0	25	Fold: ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase Superfamily: ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase Family: Heat shock protein 90, HSP90, N-terminal domain
69	c2o1wB_		not modelled	97.0	25	PDB header: chaperone Chain: B: PDB Molecule: endoplasmic reticulum protein grp94; PDBTitle: structure of n-terminal plus middle domains (n+m) of grp94
70	d2gqpa1		not modelled	96.9	19	Fold: ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase Superfamily: ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase Family: Heat shock protein 90, HSP90, N-terminal domain
71	c3zrwB_		not modelled	95.7	7	PDB header: signalling protein Chain: B: PDB Molecule: af1503 protein, osmolarity sensor protein envz; PDBTitle: the structure of the dimeric hamp-dhp fusion a291v mutant
72	c3cwvB_		not modelled	95.2	11	PDB header: isomerase Chain: B: PDB Molecule: dna gyrase, b subunit, truncated; PDBTitle: crystal structure of b-subunit of the dna gyrase from myxococcus2 xanthus
73	c3lmmA_		not modelled	77.4	18	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of the dip2311 protein from2 corynebacterium diphtheriae, northeast structural genomics3 consortium target cdr35

74	d2asxa1		55.9	21	Fold: HAMP domain-like Superfamily: HAMP domain-like Family: HAMP domain	
75	c3k7pA	Alignment	not modelled	43.3	17	PDB header: isomerase Chain: A: PDB Molecule: ribose 5-phosphate isomerase; PDBTitle: structure of mutant of ribose 5-phosphate isomerase type b from2 trypanosoma cruzi.
76	c3m1pA	Alignment	not modelled	43.1	17	PDB header: isomerase Chain: A: PDB Molecule: ribose 5-phosphate isomerase; PDBTitle: structure of ribose 5-phosphate isomerase type b from trypanosoma2 cruzi, soaked with allose-6-phosphate
77	d1j0ga_	Alignment	not modelled	41.1	22	Fold: beta-Grasp (ubiquitin-like) Superfamily: Ubiquitin-like Family: BM-002-like
78	d1xb2b1	Alignment	not modelled	28.3	26	Fold: RuvA C-terminal domain-like Superfamily: UBA-like Family: TS-N domain
79	d1efub3	Alignment	not modelled	28.2	11	Fold: RuvA C-terminal domain-like Superfamily: UBA-like Family: TS-N domain
80	d2cp9a1	Alignment	not modelled	27.9	26	Fold: RuvA C-terminal domain-like Superfamily: UBA-like Family: TS-N domain
81	d1aipc1	Alignment	not modelled	22.6	16	Fold: RuvA C-terminal domain-like Superfamily: UBA-like Family: TS-N domain
82	c2kseA	Alignment	not modelled	19.2	11	PDB header: transferase Chain: A: PDB Molecule: sensor protein qsec; PDBTitle: backbone structure of the membrane domain of e. coli2 histidine kinase receptor qsec, center for structures of3 membrane proteins (csmq) target 4311c
83	d1c8ba_	Alignment	not modelled	18.9	50	Fold: Phosphorylase/hydrolase-like Superfamily: HybD-like Family: Germination protease
84	d1wxsal	Alignment	not modelled	18.2	29	Fold: beta-Grasp (ubiquitin-like) Superfamily: Ubiquitin-like Family: BM-002-like
85	d1l7ya_	Alignment	not modelled	17.2	17	Fold: beta-Grasp (ubiquitin-like) Superfamily: Ubiquitin-like Family: BM-002-like
86	c2crqA	Alignment	not modelled	17.0	22	PDB header: translation Chain: A: PDB Molecule: mitochondrial translational initiation factor 3; PDBTitle: solution structure of c-terminal domain of riken cdna2 2810012/14
87	d1g0oa_	Alignment	not modelled	16.2	17	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Tyrosine-dependent oxidoreductases
88	c2jnvA	Alignment	not modelled	15.9	19	PDB header: metal transport Chain: A: PDB Molecule: nifu-like protein 1, chloroplast; PDBTitle: solution structure of c-terminal domain of nifu-like2 protein from oryza sativa
89	d1nn4a_	Alignment	not modelled	15.4	22	Fold: Ribose/Galactose isomerase RpiB/AlsB Superfamily: Ribose/Galactose isomerase RpiB/AlsB Family: Ribose/Galactose isomerase RpiB/AlsB
90	c3s8mA_	Alignment	not modelled	15.2	22	PDB header: oxidoreductase Chain: A: PDB Molecule: enoyl-acp reductase; PDBTitle: the crystal structure of fabv
91	d1fx7a3	Alignment	not modelled	13.9	28	Fold: SH3-like barrel Superfamily: C-terminal domain of transcriptional repressors Family: FeoA-like
92	d2d7na1	Alignment	not modelled	13.7	18	Fold: Immunoglobulin-like beta-sandwich Superfamily: E set domains Family: Filamin repeat (rod domain)
93	d1xmta_	Alignment	not modelled	13.5	11	Fold: Acyl-CoA N-acyltransferases (Nat) Superfamily: Acyl-CoA N-acyltransferases (Nat) Family: N-acetyl transferase, NAT
94	c3qivA	Alignment	not modelled	13.2	18	PDB header: oxidoreductase Chain: A: PDB Molecule: short-chain dehydrogenase or 3-oxoacyl-[acyl-carrier- PDBTitle: crystal structure of a putative short-chain dehydrogenase or 3-2 oxoacyl-[acyl-carrier-protein] reductase from mycobacterium3 paratuberculosis atcc baa-968 / k-10
95	d1s98a_	Alignment	not modelled	13.0	21	Fold: HesB-like domain Superfamily: HesB-like domain Family: HesB-like domain
96	d1veha_	Alignment	not modelled	12.8	15	Fold: Alpha-lytic protease prodomain-like Superfamily: Fe-S cluster assembly (FSCA) domain-like Family: NifU C-terminal domain-like
97	d1odka_	Alignment	not modelled	12.8	12	Fold: Phosphorylase/hydrolase-like Superfamily: Purine and uridine phosphorylases Family: Purine and uridine phosphorylases
98	c3lnrA	Alignment	not modelled	12.7	11	PDB header: signaling protein Chain: A: PDB Molecule: aerotaxis transducer aer2; PDBTitle: crystal structure of poly-hamp domains from the p. aeruginosa soluble2 receptor aer2

99	c3k6oA_	Alignment	not modelled	12.7	11	PDB header: structural genomics, unknown function Chain: A; PDB Molecule: uncharacterized protein duf1344; PDBTitle: crystal structure of protein of unknown function duf13442 (yp_001299214.1) from bacteroides vulgaris atcc 8482 at 2.00 a3 resolution
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