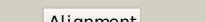
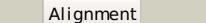
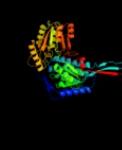
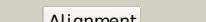
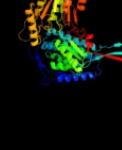


Phyre²

Email	i.a.kelley@imperial.ac.uk
Description	P76217
Date	Thu Jan 5 12:20:42 GMT 2012
Unique Job ID	af6800dc75047fbb

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c3ju8B_			100.0	62	PDB header: oxidoreductase Chain: B; PDB Molecule: succinylglutamic semialdehyde dehydrogenase; PDBTitle: crystal structure of succinylglutamic semialdehyde dehydrogenase from <i>2 pseudomonas aeruginosa</i> .
2	c2jg7G_			100.0	27	PDB header: oxidoreductase Chain: G; PDB Molecule: antiquitin; PDBTitle: crystal structure of seabream antiquitin and elucidation of its substrate specificity
3	d1a4sa_			100.0	27	Fold: ALDH-like Superfamily: ALDH-like Family: ALDH-like
4	d1bxsa_			100.0	28	Fold: ALDH-like Superfamily: ALDH-like Family: ALDH-like
5	c3ed6B_			100.0	26	PDB header: oxidoreductase Chain: B; PDB Molecule: betaine aldehyde dehydrogenase; PDBTitle: 1.7 angstrom resolution crystal structure of betaine aldehyde2 dehydrogenase (betb) from <i>staphylococcus aureus</i>
6	c3qanB_			100.0	26	PDB header: oxidoreductase Chain: B; PDB Molecule: 1-pyrroline-5-carboxylate dehydrogenase 1; PDBTitle: crystal structure of 1-pyrroline-5-carboxylate dehydrogenase from <i>2 bacillus halodurans</i>
7	c2d4eB_			100.0	29	PDB header: oxidoreductase Chain: B; PDB Molecule: 5-carboxymethyl-2-hydroxymuconate semialdehyde PDBTitle: crystal structure of the hpcc from <i>thermus thermophilus</i> hb8
8	dluzba_			100.0	31	Fold: ALDH-like Superfamily: ALDH-like Family: ALDH-like
9	c2o2qA_			100.0	26	PDB header: oxidoreductase Chain: A; PDB Molecule: formyltetrahydrofolate dehydrogenase; PDBTitle: crystal structure of the c-terminal domain of rat2 10'formyltetrahydrofolate dehydrogenase in complex with nadp
10	d1o9ja_			100.0	28	Fold: ALDH-like Superfamily: ALDH-like Family: ALDH-like
11	c3iwkB_			100.0	28	PDB header: oxidoreductase Chain: B; PDB Molecule: aminoaldehyde dehydrogenase; PDBTitle: crystal structure of aminoaldehyde dehydrogenase 1 from <i>pisum sativum</i> (psamadh1)

12	d1o04a_	Alignment		100.0	27	Fold: ALDH-like Superfamily: ALDH-like Family: ALDH-like
13	c2ve5H_	Alignment		100.0	29	PDB header: oxidoreductase Chain: H: PDB Molecule: betaine aldehyde dehydrogenase; PDBTitle: crystallographic structure of betaine aldehyde2 dehydrogenase from pseudomonas aeruginosa
14	d1ag8a_	Alignment		100.0	27	Fold: ALDH-like Superfamily: ALDH-like Family: ALDH-like
15	c1t90B_	Alignment		100.0	26	PDB header: oxidoreductase Chain: B: PDB Molecule: probable methylmalonate-semialdehyde dehydrogenase PDBTitle: crystal structure of methylmalonate semialdehyde2 dehydrogenase from bacillus subtilis
16	c2w8qA_	Alignment		100.0	29	PDB header: oxidoreductase Chain: A: PDB Molecule: succinate-semialdehyde dehydrogenase, PDBTitle: the crystal structure of human ssadhd in complex with ssa.
17	d1ky8a_	Alignment		100.0	23	Fold: ALDH-like Superfamily: ALDH-like Family: ALDH-like
18	c3b4wA_	Alignment		100.0	30	PDB header: oxidoreductase Chain: A: PDB Molecule: aldehyde dehydrogenase; PDBTitle: crystal structure of mycobacterium tuberculosis aldehyde dehydrogenase2 complexed with nad+
19	c3r31A_	Alignment		100.0	27	PDB header: oxidoreductase Chain: A: PDB Molecule: betaine aldehyde dehydrogenase; PDBTitle: crystal structure of betaine aldehyde dehydrogenase from agrobacterium2 tumefaciens
20	d1wnda_	Alignment		100.0	27	Fold: ALDH-like Superfamily: ALDH-like Family: ALDH-like
21	c3rh9A_	Alignment	not modelled	100.0	28	PDB header: oxidoreductase Chain: A: PDB Molecule: succinate-semialdehyde dehydrogenase (nad(p)+); PDBTitle: the crystal structure of oxidoreductase from marinobacter aquaeolei
22	d1euha_	Alignment	not modelled	100.0	27	Fold: ALDH-like Superfamily: ALDH-like Family: ALDH-like
23	c3ifgH_	Alignment	not modelled	100.0	31	PDB header: oxidoreductase Chain: H: PDB Molecule: succinate-semialdehyde dehydrogenase (nadp+); PDBTitle: crystal structure of succinate-semialdehyde dehydrogenase from2 burkholderia pseudomallei, part 1 of 2 PDB header: oxidoreductase
24	c3i44A_	Alignment	not modelled	100.0	27	Chain: A: PDB Molecule: aldehyde dehydrogenase; PDBTitle: crystal structure of aldehyde dehydrogenase from bartonella2 henselae at 2.0a resolution
25	c3prlD_	Alignment	not modelled	100.0	25	PDB header: oxidoreductase Chain: D: PDB Molecule: nadp-dependent glyceraldehyde-3-phosphate dehydrogenase; PDBTitle: crystal structure of nadp-dependent glyceraldehyde-3-phosphate2 dehydrogenase from bacillus halodurans c-125
26	c3ek1C_	Alignment	not modelled	100.0	30	PDB header: oxidoreductase Chain: C: PDB Molecule: aldehyde dehydrogenase; PDBTitle: crystal structure of aldehyde dehydrogenase from brucella2 melitensis biovar abortus 2308
27	c3jz4C_	Alignment	not modelled	100.0	31	PDB header: oxidoreductase Chain: C: PDB Molecule: succinate-semialdehyde dehydrogenase [nadp+]; PDBTitle: crystal structure of e. coli nadp dependent enzyme
						PDB header: oxidoreductase

28	c2hg2A	Alignment	not modelled	100.0	28	PDB header: oxidoreductase Chain: A: PDB Molecule: aldehyde dehydrogenase a; PDBTitle: structure of lactaldehyde dehydrogenase
29	c3k2wD	Alignment	not modelled	100.0	24	PDB header: oxidoreductase Chain: D: PDB Molecule: betaine-aldehyde dehydrogenase; PDBTitle: crystal structure of betaine-aldehyde dehydrogenase from2 pseudoalteromonas atlantica t6c
30	c3hazA	Alignment	not modelled	100.0	29	PDB header: oxidoreductase Chain: A: PDB Molecule: proline dehydrogenase; PDBTitle: crystal structure of bifunctional proline utilization a2 (puta) protein
31	c3rosA	Alignment	not modelled	100.0	21	PDB header: oxidoreductase Chain: A: PDB Molecule: nad-dependent aldehyde dehydrogenase; PDBTitle: crystal structure of nad-dependent aldehyde dehydrogenase from2 lactobacillus acidophilus
32	c3efvC	Alignment	not modelled	100.0	24	PDB header: oxidoreductase Chain: C: PDB Molecule: putative succinate-semialdehyde dehydrogenase; PDBTitle: crystal structure of a putative succinate-semialdehyde dehydrogenase2 from salmonella typhimurium lt2 with bound nad
33	c2vroB	Alignment	not modelled	100.0	23	PDB header: oxidoreductase Chain: B: PDB Molecule: aldehyde dehydrogenase; PDBTitle: crystal structure of aldehyde dehydrogenase from2 burkholderia xenovorans lb400
34	d1bi9a	Alignment	not modelled	100.0	28	Fold: ALDH-like Superfamily: ALDH-like Family: ALDH-like
35	c3r64A	Alignment	not modelled	100.0	28	PDB header: oxidoreductase Chain: A: PDB Molecule: nad dependent benzaldehyde dehydrogenase; PDBTitle: crystal structure of a nad-dependent benzaldehyde dehydrogenase from2 corynebacterium glutamicum
36	c3pqaA	Alignment	not modelled	100.0	27	PDB header: oxidoreductase Chain: A: PDB Molecule: lactaldehyde dehydrogenase; PDBTitle: crystal structure of glyceraldehyde-3-phosphate dehydrogenase gapn2 from methanocaldococcus jannaschii dsm 2661
37	d1ad3a	Alignment	not modelled	100.0	22	Fold: ALDH-like Superfamily: ALDH-like Family: ALDH-like
38	c3v4cB	Alignment	not modelled	100.0	27	PDB header: oxidoreductase Chain: B: PDB Molecule: aldehyde dehydrogenase (nadp+); PDBTitle: crystal structure of a semialdehyde dehydrogenase from sinorhizobium2 meliloti 1021
39	d1ez0a	Alignment	not modelled	100.0	22	Fold: ALDH-like Superfamily: ALDH-like Family: ALDH-like
40	c3InsD	Alignment	not modelled	100.0	24	PDB header: oxidoreductase Chain: D: PDB Molecule: benzaldehyde dehydrogenase; PDBTitle: benzaldehyde dehydrogenase, a class 3 aldehyde dehydrogenase, with2 bound nadp+ and benzoate adduct
41	c3k9dD	Alignment	not modelled	100.0	18	PDB header: oxidoreductase Chain: D: PDB Molecule: aldehyde dehydrogenase; PDBTitle: crystal structure of probable aldehyde dehydrogenase from listeria2 monocytogenes egd-e
42	d1o20a	Alignment	not modelled	100.0	16	Fold: ALDH-like Superfamily: ALDH-like Family: ALDH-like
43	c3my7A	Alignment	not modelled	100.0	18	PDB header: oxidoreductase Chain: A: PDB Molecule: alcohol dehydrogenase/acetaldehyde dehydrogenase; PDBTitle: the crystal structure of the acdh domain of an alcohol dehydrogenase2 from vibrio parahaemolyticus to 2.25a
44	c2h5gA	Alignment	not modelled	100.0	18	PDB header: oxidoreductase Chain: A: PDB Molecule: delta 1-pyrroline-5-carboxylate synthetase; PDBTitle: crystal structure of human pyrroline-5-carboxylate synthetase
45	d1vluA	Alignment	not modelled	100.0	15	Fold: ALDH-like Superfamily: ALDH-like Family: ALDH-like
46	c1vluB	Alignment	not modelled	100.0	16	PDB header: oxidoreductase Chain: B: PDB Molecule: gamma-glutamyl phosphate reductase; PDBTitle: crystal structure of gamma-glutamyl phosphate reductase (yor323c) from2 saccharomyces cerevisiae at 2.40 a resolution
47	d1k75a	Alignment	not modelled	97.8	18	Fold: ALDH-like Superfamily: ALDH-like Family: L-histidinol dehydrogenase HisD
48	c2crjA	Alignment	not modelled	33.7	18	PDB header: gene regulation Chain: A: PDB Molecule: swi/snf-related matrix-associated actin- PDBTitle: solution structure of the hmg domain of mouse hmg domain2 protein hmgx2
49	d1a9xa2	Alignment	not modelled	31.9	21	Fold: Methylglyoxal synthase-like Superfamily: Methylglyoxal synthase-like Family: Carbamoyl phosphate synthetase, large subunit allosteric, C-terminal domain
50	d1k99a	Alignment	not modelled	31.7	8	Fold: HMG-box Superfamily: HMG-box Family: HMG-box
51	c1j3xA	Alignment	not modelled	31.4	14	PDB header: dna binding protein Chain: A: PDB Molecule: high mobility group protein 2; PDBTitle: solution structure of the n-terminal domain of the hmgb2
52	d1j3xa	Alignment	not modelled	31.4	14	Fold: HMG-box Superfamily: HMG-box Family: HMG-box
						PDB header: transferase Chain: A: PDB Molecule: myeloid/lymphoid or mixed-lineage

53	c2yukA_	Alignment	not modelled	30.8	19	leukemia PDBTitle: solution structure of the hmg box of human myeloid/lymphoid2 or mixed-lineage leukemia protein 3 homolog PDB header: transcription Chain: A: PDB Molecule: high mobility group protein b3; PDBTitle: solution structure of the first hmg-box domain from high2 mobility group protein b3
54	c2eqzA_	Alignment	not modelled	30.3	18	Fold: NAD kinase/diacylglycerol kinase-like Superfamily: NAD kinase/diacylglycerol kinase-like Family: NAD kinase-like
55	d1u0ta_	Alignment	not modelled	29.9	15	PDB header: protein binding Chain: B: PDB Molecule: adapter protein meca 1; PDBTitle: crystal structure of the c-terminal domain of meca
56	c3jtpB_	Alignment	not modelled	29.0	27	PDB header: transcription Chain: A: PDB Molecule: transcription factor a, mitochondrial; PDBTitle: human mitochondrial transcription factor a box b
57	c3fghA_	Alignment	not modelled	28.6	13	Fold: HMG-box Superfamily: HMG-box Family: HMG-box
58	d2lefA_	Alignment	not modelled	26.6	17	Fold: NAD kinase/diacylglycerol kinase-like Superfamily: NAD kinase/diacylglycerol kinase-like Family: Diacylglycerol kinase-like
59	d2bona1	Alignment	not modelled	25.0	14	Fold: HMG-box Superfamily: HMG-box Family: HMG-box
60	d1j46a_	Alignment	not modelled	24.9	14	PDB header: dna binding protein Chain: A: PDB Molecule: pms1 protein homolog 1; PDBTitle: solution structure of the hmg domain of human dna mismatch2 repair protein
61	c2cs1A_	Alignment	not modelled	22.6	21	Fold: HMG-box Superfamily: HMG-box Family: HMG-box
62	d1hsma_	Alignment	not modelled	22.4	16	PDB header: transcription/dna Chain: C: PDB Molecule: transcription factor sox-4; PDBTitle: structure of the sox4 hmg domain bound to dna
63	d1lwma_	Alignment	not modelled	21.7	13	Fold: HMG-box Superfamily: HMG-box Family: HMG-box
64	c2yvqA_	Alignment	not modelled	21.3	8	PDB header: ligase Chain: A: PDB Molecule: carbamoyl-phosphate synthase; PDBTitle: crystal structure of mgs domain of carbamoyl-phosphate2 synthetase from homo sapiens
65	c3u2bC_	Alignment	not modelled	20.9	14	PDB header: transcription/dna Chain: C: PDB Molecule: uncharacterized protein rumgna_01417; PDBTitle: crystal structure of protein rumgna_01417 from ruminococcus gnavus,2 northeast structural genomics consortium target ugr76
66	c3nr1B_	Alignment	not modelled	20.9	9	Fold: HMG-box Superfamily: HMG-box Family: HMG-box
67	d1gt0d_	Alignment	not modelled	20.2	17	Fold: HMG-box Superfamily: HMG-box Family: HMG-box
68	d1ckta_	Alignment	not modelled	19.5	17	Fold: HMG-box Superfamily: HMG-box Family: HMG-box
69	d1u2ca2	Alignment	not modelled	19.5	14	Fold: Dystroglycan, domain 2 Superfamily: Dystroglycan, domain 2 Family: Dystroglycan, domain 2
70	d1v64a_	Alignment	not modelled	19.4	18	Fold: HMG-box Superfamily: HMG-box Family: HMG-box
71	d1s7ia_	Alignment	not modelled	19.2	11	Fold: Ferredoxin-like Superfamily: Dimeric alpha+beta barrel Family: DGPF domain (Pfam 04946)
72	d1v63a_	Alignment	not modelled	19.1	16	Fold: HMG-box Superfamily: HMG-box Family: HMG-box
73	c2co9A_	Alignment	not modelled	18.5	15	PDB header: transcription Chain: A: PDB Molecule: thymus high mobility group box protein tox; PDBTitle: solution structure of the hmg_box domain of thymus high2 mobility group box protein tox from mouse
74	c1hmfa_	Alignment	not modelled	18.3	14	PDB header: dna-binding Chain: A: PDB Molecule: high mobility group protein fragment-b; PDBTitle: structure of the hmg box motif in the b-domain of hmg1
75	d1hmfa_	Alignment	not modelled	18.3	14	Fold: HMG-box Superfamily: HMG-box Family: HMG-box
76	c2yula_	Alignment	not modelled	18.2	19	PDB header: transcription Chain: A: PDB Molecule: transcription factor sox-17; PDBTitle: solution structure of the hmg box of human transcription2 factor sox-17
77	d1j3da_	Alignment	not modelled	18.0	18	Fold: HMG-box Superfamily: HMG-box Family: HMG-box
78	c3g5oC_	Alignment	not modelled	17.7	24	PDB header: toxin/antitoxin Chain: C: PDB Molecule: uncharacterized protein rv2866; PDBTitle: the crystal structure of the toxin-antitoxin complex relbe2 (rv2865-2 2866) from mycobacterium tuberculosis
79	d1s99a_	Alignment	not modelled	17.1	11	Fold: Ferredoxin-like Superfamily: MTH1187/YkoF-like Family: Putative thiamin/HMP-binding protein YkoF

80	d1t0tv	Alignment	not modelled	16.7	28	Fold: Ferredoxin-like Superfamily: Dimeric alpha+beta barrel Family: Chlorite dismutase-like
81	d1vdha	Alignment	not modelled	16.5	21	Fold: Ferredoxin-like Superfamily: Dimeric alpha+beta barrel Family: Chlorite dismutase-like
82	c3labA	Alignment	not modelled	16.4	22	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: putative kdpg (2-keto-3-deoxy-6-phosphogluconate) PDBTitle: crystal structure of a putative kdpg (2-keto-3-deoxy-6-phosphogluconate) aldolase from oleispira antarctica
83	c2lhjA	Alignment	not modelled	15.7	13	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: high mobility group protein homolog nhp1; PDBTitle: nmr structure of the high mobility group protein-like protein nhp12 from babesia bovis t2bo (baboa.00841.a)
84	c3v4gA	Alignment	not modelled	15.1	13	PDB header: dna binding protein Chain: A: PDB Molecule: arginine repressor; PDBTitle: 1.60 angstrom resolution crystal structure of an arginine repressor2 from vibrio vulnificus cmcp6
85	c3gyyC	Alignment	not modelled	14.9	11	PDB header: transport protein Chain: C: PDB Molecule: periplasmic substrate binding protein; PDBTitle: the ectoine binding protein of the teaabc trap transporter teaa in the2 apo-state
86	d2jgra1	Alignment	not modelled	14.5	14	Fold: NAD kinase/diacylglycerol kinase-like Superfamily: NAD kinase/diacylglycerol kinase-like Family: Diacylglycerol kinase-like
87	d2tpa3	Alignment	not modelled	14.5	23	Fold: alpha/beta-Hammerhead Superfamily: Pyrimidine nucleoside phosphorylase C-terminal domain Family: Pyrimidine nucleoside phosphorylase C-terminal domain
88	d2gzka2	Alignment	not modelled	14.4	14	Fold: HMG-box Superfamily: HMG-box Family: HMG-box
89	c1hrzA	Alignment	not modelled	14.4	14	PDB header: dna binding protein/dna Chain: A: PDB Molecule: human sry; PDBTitle: the 3d structure of the human sry-dna complex solved by2 multi-dimensional heteronuclear-edited and-filtered nmr
90	c1hryA	Alignment	not modelled	14.4	14	PDB header: dna binding protein/dna Chain: A: PDB Molecule: human sry; PDBTitle: the 3d structure of the human sry-dna complex solved by2 multi-dimensional heteronuclear-edited and-filtered nmr
91	c2e6oA	Alignment	not modelled	13.6	23	PDB header: transcription, cell cycle Chain: A: PDB Molecule: hmg box-containing protein 1; PDBTitle: solution structure of the hmg box domain from human hmg-box2 transcription factor 1
92	c3e7hA	Alignment	not modelled	13.4	17	PDB header: transferase Chain: A: PDB Molecule: dna-directed rna polymerase subunit beta; PDBTitle: the crystal structure of the beta subunit of the dna-2 directed rna polymerase from vibrio cholerae o1 biovar3 eltor
93	d1xxaa	Alignment	not modelled	13.2	19	Fold: DCoH-like Superfamily: C-terminal domain of arginine repressor Family: C-terminal domain of arginine repressor
94	d1wu2a3	Alignment	not modelled	13.2	16	Fold: Molybdenum cofactor biosynthesis proteins Superfamily: Molybdenum cofactor biosynthesis proteins Family: MoeA central domain-like
95	c2bonB	Alignment	not modelled	13.0	14	PDB header: transferase Chain: B: PDB Molecule: lipid kinase; PDBTitle: structure of an escherichia coli lipid kinase (yegs)
96	c3qwua	Alignment	not modelled	13.0	18	PDB header: ligase Chain: A: PDB Molecule: dna ligase; PDBTitle: putative atp-dependent dna ligase from aquifex aeolicus.
97	d1y5ea1	Alignment	not modelled	12.6	26	Fold: Molybdenum cofactor biosynthesis proteins Superfamily: Molybdenum cofactor biosynthesis proteins Family: MogA-like
98	c1usdA	Alignment	not modelled	12.5	21	PDB header: signalling protein Chain: A: PDB Molecule: vasodilator-stimulated phosphoprotein; PDBTitle: human vasp tetramerisation domain l352m
99	c2ec4A	Alignment	not modelled	12.1	16	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: fas-associated factor 1; PDBTitle: solution structure of the uas domain from human fas-2 associated factor 1