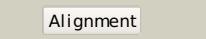
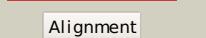
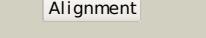
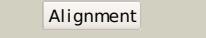


Phyre²

Email	i.a.kelley@imperial.ac.uk
Description	P60651
Date	Thu Jan 5 12:07:00 GMT 2012
Unique Job ID	b00b3ed96ca944b2

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c3nipB_			100.0	40	PDB header: hydrolase Chain: B; PDB Molecule: 3-guanidinopropionase; PDBTitle: crystal structure of pseudomonas aeruginosa guanidinopropionase2 complexed with 1,6-diaminohexane
2	d1gq6a_			100.0	40	Fold: Arginase/deacetylase Superfamily: Arginase/deacetylase Family: Arginase-like amidino hydrolases
3	c3nioF_			100.0	40	PDB header: hydrolase Chain: F; PDB Molecule: guanidinobutyrase; PDBTitle: crystal structure of pseudomonas aeruginosa guanidinobutyrase
4	c3m1rF_			100.0	23	PDB header: hydrolase Chain: F; PDB Molecule: formimidoylglutamate; PDBTitle: the crystal structure of formimidoylglutamate from bacillus2 subtilis subsp. subtilis str. 168
5	c3lhIA_			100.0	27	PDB header: hydrolase Chain: A; PDB Molecule: putative agmatinase; PDBTitle: crystal structure of a putative agmatinase from clostridium difficile
6	d1woha_			100.0	29	Fold: Arginase/deacetylase Superfamily: Arginase/deacetylase Family: Arginase-like amidino hydrolases
7	d1xfka_			100.0	23	Fold: Arginase/deacetylase Superfamily: Arginase/deacetylase Family: Arginase-like amidino hydrolases
8	d2a0ma1			100.0	24	Fold: Arginase/deacetylase Superfamily: Arginase/deacetylase Family: Arginase-like amidino hydrolases
9	c3pzIA_			100.0	27	PDB header: hydrolase Chain: A; PDB Molecule: agmatine ureohydrolase; PDBTitle: the crystal structure of agmatine ureohydrolase of thermoplasma2 volcanium
10	d1pq3a_			100.0	25	Fold: Arginase/deacetylase Superfamily: Arginase/deacetylase Family: Arginase-like amidino hydrolases
11	d1d3va_			100.0	27	Fold: Arginase/deacetylase Superfamily: Arginase/deacetylase Family: Arginase-like amidino hydrolases

12	d2ceva_			100.0	30	Fold: Arginase/deacetylase Superfamily: Arginase/deacetylase Family: Arginase-like amidino hydrolases
13	c3mmrA_			100.0	23	PDB header: hydrolase Chain: A: PDB Molecule: arginase; PDBTitle: structure of plasmodium falciparum arginase in complex with abh
14	d2aeba1			100.0	29	Fold: Arginase/deacetylase Superfamily: Arginase/deacetylase Family: Arginase-like amidino hydrolases
15	c2eivH_			100.0	29	PDB header: hydrolase Chain: H: PDB Molecule: arginase; PDBTitle: crystal structure of the arginase from thermus thermophilus
16	c3a8tA_			80.6	12	PDB header: transferase Chain: A: PDB Molecule: adenylate isopentenyltransferase; PDBTitle: plant adenylate isopentenyltransferase in complex with atp
17	c3d3qB_			71.7	20	PDB header: transferase Chain: B: PDB Molecule: tRNA delta(2)-isopentenylpyrophosphate transferase; PDBTitle: crystal structure of tRNA delta(2)-isopentenylpyrophosphate2 transferase (se0981) from staphylococcus epidermidis.3 northeast structural genomics consortium target ser100
18	c3ep1A_			67.9	17	PDB header: transferase/rna Chain: A: PDB Molecule: tRNA isopentenyltransferase; PDBTitle: crystallographic snapshots of eukaryotic2 dimethylallyltransferase acting on tRNA: insight into tRNA3 recognition and reaction mechanism
19	c3fozB_			67.5	25	PDB header: transferase/rna Chain: B: PDB Molecule: tRNA delta(2)-isopentenylpyrophosphate transferase; PDBTitle: structure of e. coli isopentenyl-tRNA transferase in complex with e. coli tRNA(phe)
20	c3exaD_			65.1	9	PDB header: transferase Chain: D: PDB Molecule: tRNA delta(2)-isopentenylpyrophosphate transferase; PDBTitle: crystal structure of the full-length tRNA2 isopentenylpyrophosphate transferase (bh2366) from bacillus halodurans, northeast structural genomics4 consortium target bhr41.
21	c3crqA_		not modelled	64.5	28	PDB header: transferase Chain: A: PDB Molecule: tRNA delta(2)-isopentenylpyrophosphate transferase; PDBTitle: structure of tRNA dimethylallyltransferase: rna2 modification through a channel
22	d1lumya_		not modelled	59.4	16	Fold: TIM beta/alpha-barrel Superfamily: Homocysteine S-methyltransferase Family: Homocysteine S-methyltransferase
23	c3godA_		not modelled	50.1	17	PDB header: immune system Chain: A: PDB Molecule: cas1; PDBTitle: structural basis for dnase activity of a conserved protein2 implicated in crisper-mediated antiviral defense
24	d1lt7a_		not modelled	43.7	15	Fold: TIM beta/alpha-barrel Superfamily: Homocysteine S-methyltransferase Family: Homocysteine S-methyltransferase
25	d2f1qa1		not modelled	39.9	14	Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: GatZ-like
26	d1tif1a_		not modelled	32.6	23	Fold: beta-Grasp (ubiquitin-like) Superfamily: Translation initiation factor IF3, N-terminal domain Family: Translation initiation factor IF3, N-terminal domain
27	d1hi9a_		not modelled	31.3	15	Fold: Dipeptide transport protein Superfamily: Dipeptide transport protein Family: Dipeptide transport protein
28	c2oh2B_		not modelled	30.4	20	PDB header: transferase/dna Chain: B: PDB Molecule: dNA polymerase kappa; PDBTitle: ternary complex of human dNA polymerase
29	c2ze5A		not modelled	28.3	14	PDB header: transferase Chain: A: PDB Molecule: isopentenyl transferase;

29	c22ejm	Alignment	not modelled	28.5	14	PDBTitle: crystal structure of adenosine phosphate-isopentenyltransferase PDB header: immune system
30	c3nkdB	Alignment	not modelled	27.5	17	Chain: B: PDB Molecule: crispr-associated protein cas1; PDBTitle: structure of crisp-associated protein cas1 from escherichia coli str.2 k-12 PDB header: replication
31	c1t94B	Alignment	not modelled	24.3	19	Chain: B: PDB Molecule: polymerase (dna directed) kappa; PDBTitle: crystal structure of the catalytic core of human dna2 polymerase kappa
32	d1kyqa1	Alignment	not modelled	23.0	33	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Siroheme synthase N-terminal domain-like
33	c2c2xB	Alignment	not modelled	22.7	23	PDB header: oxidoreductase Chain: B: PDB Molecule: methylenetetrahydrofolate dehydrogenase- PDBTitle: three dimensional structure of bifunctional2 methylenetetrahydrofolate dehydrogenase-cyclohydrolase3 from mycobacterium tuberculosis
34	c1k98A	Alignment	not modelled	22.3	24	PDB header: transferase Chain: A: PDB Molecule: methionine synthase; PDBTitle: adomet complex of meth c-terminal fragment
35	c3pv9D	Alignment	not modelled	22.2	17	PDB header: immune system Chain: D: PDB Molecule: putative uncharacterized protein ph1245; PDBTitle: structure of ph1245, a cas1 from pyrococcus horikoshii
36	c3lfxE	Alignment	not modelled	19.0	10	Chain: E: PDB Molecule: uncharacterized protein; PDBTitle: structure of tm1797, a cas1 protein from thermotoga maritima
37	c2z84A	Alignment	not modelled	17.6	15	PDB header: hydrolase Chain: A: PDB Molecule: ufm1-specific protease 1; PDBTitle: insights from crystal and solution structures of mouse ufsp1
38	d3bofa2	Alignment	not modelled	15.3	20	Fold: TIM beta/alpha-barrel Superfamily: Homocysteine S-methyltransferase Family: Homocysteine S-methyltransferase
39	c3ecsD	Alignment	not modelled	14.9	14	PDB header: translation Chain: D: PDB Molecule: translation initiation factor eif-2b subunit PDBTitle: crystal structure of human eif2b alpha
40	c2yzsB	Alignment	not modelled	14.4	17	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: putative uncharacterized protein; PDBTitle: crystal structure of uncharacterized conserved protein from aquifex aeolicus
41	c1a4iB	Alignment	not modelled	13.7	21	PDB header: oxidoreductase Chain: B: PDB Molecule: methylenetetrahydrofolate dehydrogenase / PDBTitle: human tetrahydrofolate dehydrogenase / cyclohydrolase
42	d2bona1	Alignment	not modelled	12.9	14	Fold: NAD kinase/diacylglycerol kinase-like Superfamily: NAD kinase/diacylglycerol kinase-like Family: Diacylglycerol kinase-like
43	c1vbwA	Alignment	not modelled	12.9	20	PDB header: protein binding Chain: A: PDB Molecule: trypsin inhibitor bgit; PDBTitle: crystal structure of bitter gourd trypsin inhibitor
44	c3mr2A	Alignment	not modelled	12.7	36	PDB header: transf erase/dna Chain: A: PDB Molecule: dna polymerase eta; PDBTitle: human dna polymerase eta in complex with normal dna and incoming2 nucleotide (nrm)
45	d1t94a2	Alignment	not modelled	12.1	20	Fold: DNA/RNA polymerases Superfamily: DNA/RNA polymerases Family: Lesion bypass DNA polymerase (Y-family), catalytic domain
46	d1b74a1	Alignment	not modelled	11.6	12	Fold: ATC-like Superfamily: Aspartate/glutamate racemase Family: Aspartate/glutamate racemase
47	c3pu6A	Alignment	not modelled	11.6	13	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: the crystal structure of an uncharacterized protein from wolinella2 succinogenes
48	d2hkja1	Alignment	not modelled	11.2	22	Fold: S13-like H2TH domain Superfamily: S13-like H2TH domain Family: Topoisomerase VI-B subunit middle domain
49	d1w85b1	Alignment	not modelled	11.2	17	Fold: Thiamin diphosphate-binding fold (THDP-binding) Superfamily: Thiamin diphosphate-binding fold (THDP-binding) Family: Branched-chain alpha-keto acid dehydrogenase Pyr module
50	d1b0aa1	Alignment	not modelled	10.6	27	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Aminoacid dehydrogenase-like, C-terminal domain
51	c3h7aC	Alignment	not modelled	10.4	6	PDB header: oxidoreductase Chain: C: PDB Molecule: short chain dehydrogenase; PDBTitle: crystal structure of short-chain dehydrogenase from2 rhodopseudomonas palustris
52	c3l07B	Alignment	not modelled	10.2	24	PDB header: oxidoreductase,hydrolase Chain: B: PDB Molecule: bifunctional protein fold; PDBTitle: methylenetetrahydrofolate dehydrogenase/methenyltetrahydrofolate2 cyclohydrolase, putative bifunctional protein fold from francisella3 tularensis.
53	c1b0aA	Alignment	not modelled	10.0	27	PDB header: oxidoreductase,hydrolase Chain: A: PDB Molecule: protein (fold bifunctional protein); PDBTitle: 5,10, methylene-tetrahydropholate2 dehydrogenase/cyclohydrolase from e coli.
54	c3ngLA	Alignment	not modelled	9.8	24	PDB header: oxidoreductase, hydrolase Chain: A: PDB Molecule: bifunctional protein fold; PDBTitle: crystal structure of bifunctional 5,10-methylenetetrahydrofolate2 dehydrogenase / cyclohydrolase from thermoplasma acidophilum

55	c3dfzB	Alignment	not modelled	9.6	16	PDB header: oxidoreductase Chain: B: PDB Molecule: precorrin-2 dehydrogenase; PDBTitle: sirc, precorrin-2 dehydrogenase
56	c3s40C	Alignment	not modelled	9.5	17	PDB header: transferase Chain: C: PDB Molecule: diacylglycerol kinase; PDBTitle: the crystal structure of a diacylglycerol kinases from bacillus2 anthracis str. sterne
57	c2bp7F	Alignment	not modelled	9.5	15	PDB header: oxidoreductase Chain: F: PDB Molecule: 2-oxoisovalerate dehydrogenase beta subunit; PDBTitle: new crystal form of the pseudomonas putida branched-chain2 dehydrogenase (e1)
58	d1ccra	Alignment	not modelled	9.3	34	Fold: Cytochrome c Superfamily: Cytochrome c Family: monodomain cytochrome c
59	d1dwma	Alignment	not modelled	9.3	23	Fold: Cl-2 family of serine protease inhibitors Superfamily: Cl-2 family of serine protease inhibitors Family: Cl-2 family of serine protease inhibitors
60	d1k1sa2	Alignment	not modelled	9.3	20	Fold: DNA/RNA polymerases Superfamily: DNA/RNA polymerases Family: Lesion bypass DNA polymerase (Y-family), catalytic domain
61	c3gqcB	Alignment	not modelled	9.1	17	PDB header: transferase/dna Chain: B: PDB Molecule: dna repair protein rev1; PDBTitle: structure of human rev1-dna-dntp ternary complex
62	c1tinA	Alignment	not modelled	8.8	20	PDB header: serine protease inhibitor Chain: A: PDB Molecule: trypsin inhibitor v; PDBTitle: three-dimensional structure in solution of cucurbita maxima2 trypsin inhibitor-v determined by nmr spectroscopy
63	c2w9kA	Alignment	not modelled	8.8	25	PDB header: electron transport Chain: A: PDB Molecule: cytochrome c; PDBTitle: critidia fasciculata cytochrome c
64	d1k8kg	Alignment	not modelled	8.7	13	Fold: alpha-alpha superhelix Superfamily: Arp2/3 complex 16 kDa subunit ARPC5 Family: Arp2/3 complex 16 kDa subunit ARPC5
65	d1ebfa2	Alignment	not modelled	8.6	14	Fold: FwdE/GAPDH domain-like Superfamily: Glyceraldehyde-3-phosphate dehydrogenase-like, C-terminal domain Family: Homoserine dehydrogenase-like
66	c3auzA	Alignment	not modelled	8.6	19	PDB header: recombination Chain: A: PDB Molecule: dna double-strand break repair protein mre11; PDBTitle: crystal structure of mre11 with manganese
67	c3bolB	Alignment	not modelled	8.4	19	PDB header: transferase Chain: B: PDB Molecule: 5-methyltetrahydrofolate s-homocysteine PDBTitle: cobalamin-dependent methionine synthase (1-566) from thermotoga maritima complexed with zn2+
68	d2d5ra1	Alignment	not modelled	8.2	22	Fold: Ribonuclease H-like motif Superfamily: Ribonuclease H-like Family: CAF1-like ribonuclease
69	c1k1qA	Alignment	not modelled	8.2	20	PDB header: transcription Chain: A: PDB Molecule: dbh protein; PDBTitle: crystal structure of a dinb family error prone dna2 polymerase from sulfolobus solfataricus
70	d1ytca	Alignment	not modelled	8.1	20	Fold: Cytochrome c Superfamily: Cytochrome c Family: monodomain cytochrome c
71	c2flIA	Alignment	not modelled	8.0	24	PDB header: replication/dna Chain: A: PDB Molecule: dna polymerase iota; PDBTitle: ternary complex of human dna polymerase iota with dna and dntp
72	d1im4a	Alignment	not modelled	7.9	14	Fold: DNA/RNA polymerases Superfamily: DNA/RNA polymerases Family: Lesion bypass DNA polymerase (Y-family), catalytic domain
73	c3fwaA	Alignment	not modelled	7.9	15	PDB header: flavoprotein Chain: A: PDB Molecule: reticuline oxidase; PDBTitle: structure of berberine bridge enzyme, c166a variant in complex with2 (s)-reticuline
74	c3av0A	Alignment	not modelled	7.9	19	PDB header: recombination Chain: A: PDB Molecule: dna double-strand break repair protein mre11; PDBTitle: crystal structure of mre11-rad50 bound to atp s
75	c1t3nB	Alignment	not modelled	7.8	36	PDB header: replication/dna Chain: B: PDB Molecule: polymerase (dna directed) iota; PDBTitle: structure of the catalytic core of dna polymerase iota in2 complex with dna and dntp
76	c1sseA	Alignment	not modelled	7.7	38	PDB header: transcription activator Chain: A: PDB Molecule: ap-1 like transcription factor yap1; PDBTitle: solution structure of the oxidized form of the yap1 redox2 domain
77	c4a26B	Alignment	not modelled	7.6	21	PDB header: oxidoreductase Chain: B: PDB Molecule: putative c-1-tetrahydrofolate synthase, cytoplasmic; PDBTitle: the crystal structure of leishmania major n5,n10-2 methylenetetrahydrofolate dehydrogenase/cyclohydrolase
78	d1t5oa	Alignment	not modelled	7.6	16	Fold: NagB/RpiA/CoA transferase-like Superfamily: NagB/RpiA/CoA transferase-like Family: IF2B-like
79	c2ri0B	Alignment	not modelled	7.5	14	PDB header: hydrolase Chain: B: PDB Molecule: glucosamine-6-phosphate deaminase; PDBTitle: crystal structure of glucosamine 6-phosphate deaminase (nagb) from s.2 mutans
80	d1ii7a	Alignment	not modelled	7.4	16	Fold: Metallo-dependent phosphatases Superfamily: Metallo-dependent phosphatases Family: DNA double-strand break repair nuclease
						Fold: Flavodoxin-like

81	d3bula2	Alignment	not modelled	7.3	23	Superfamily: Cobalamin (vitamin B12)-binding domain Family: Cobalamin (vitamin B12)-binding domain
82	d2ozlb1	Alignment	not modelled	7.2	10	Fold: Thiamin diphosphate-binding fold (THDP-binding) Superfamily: Thiamin diphosphate-binding fold (THDP-binding) Family: Branched-chain alpha-keto acid dehydrogenase Pyr module
83	c3outC_	Alignment	not modelled	7.0	10	PDB header: isomerase Chain: C: PDB Molecule: glutamate racemase; PDBTitle: crystal structure of glutamate racemase from francisella tularensis2 subsp. tularensis schu s4 in complex with d-glutamate.
84	c1fcdb_	Alignment	not modelled	7.0	15	PDB header: electron transport(flavocytochrome) Chain: B: PDB Molecule: flavocytochrome c sulfide dehydrogenase (flavin- PDBTitle: the structure of flavocytochrome c sulfide dehydrogenase2 from a purple phototrophic bacterium chromatium vinosum at3 2.5 angstroms resolution
85	d1qs0b1	Alignment	not modelled	6.9	13	Fold: Thiamin diphosphate-binding fold (THDP-binding) Superfamily: Thiamin diphosphate-binding fold (THDP-binding) Family: Branched-chain alpha-keto acid dehydrogenase Pyr module
86	c3p2oB_	Alignment	not modelled	6.9	32	PDB header: oxidoreductase, hydrolase Chain: B: PDB Molecule: bifunctional protein fold; PDBTitle: crystal structure of fold bifunctional protein from campylobacter2 jejuni
87	c2aq4A_	Alignment	not modelled	6.8	22	PDB header: transferase Chain: A: PDB Molecule: dna repair protein rev1; PDBTitle: ternary complex of the catalytic core of rev1 with dna and dctp.
88	c3p2oA_	Alignment	not modelled	6.8	24	PDB header: oxidoreductase, hydrolase Chain: A: PDB Molecule: bifunctional protein fold; PDBTitle: crystal structure of fold bifunctional protein from campylobacter2 jejuni
89	d1j20a2	Alignment	not modelled	6.7	33	Fold: Argininosuccinate synthetase, C-terminal domain Superfamily: Argininosuccinate synthetase, C-terminal domain Family: Argininosuccinate synthetase, C-terminal domain
90	d1a4ia1	Alignment	not modelled	6.7	21	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Aminoacid dehydrogenase-like, C-terminal domain
91	c2r8kB_	Alignment	not modelled	6.6	9	PDB header: replication, transferase/dna Chain: B: PDB Molecule: dna polymerase eta; PDBTitle: structure of the eukaryotic dna polymerase eta in complex with 1,2-2 d(gppg)-cisplatin containing dna
92	d1vyra_	Alignment	not modelled	6.6	13	Fold: TIM beta/alpha-barrel Superfamily: FMN-linked oxidoreductases Family: FMN-linked oxidoreductases
93	d1zeta2	Alignment	not modelled	6.6	27	Fold: DNA/RNA polymerases Superfamily: DNA/RNA polymerases Family: Lesion bypass DNA polymerase (Y-family), catalytic domain
94	d1poia_	Alignment	not modelled	6.4	14	Fold: NagB/RpiA/CoA transferase-like Superfamily: NagB/RpiA/CoA transferase-like Family: CoA transferase alpha subunit-like
95	d1ju2a1	Alignment	not modelled	6.3	23	Fold: FAD/NAD(P)-binding domain Superfamily: FAD/NAD(P)-binding domain Family: FAD-linked reductases, N-terminal domain
96	d2qapa1	Alignment	not modelled	6.1	19	Fold: TIM beta/alpha-barrel Superfamily: AlDolase Family: Class I aldolase
97	d2bfdb1	Alignment	not modelled	6.0	15	Fold: Thiamin diphosphate-binding fold (THDP-binding) Superfamily: Thiamin diphosphate-binding fold (THDP-binding) Family: Branched-chain alpha-keto acid dehydrogenase Pyr module
98	c1cirA_	Alignment	not modelled	6.0	28	PDB header: serine protease inhibitor Chain: A: PDB Molecule: chymotrypsin inhibitor 2; PDBTitle: complex of two fragments of ci2 [(1-40)(dot)(41-64)]
99	d1fcda1	Alignment	not modelled	6.0	17	Fold: FAD/NAD(P)-binding domain Superfamily: FAD/NAD(P)-binding domain Family: FAD/NAD-linked reductases, N-terminal and central domains