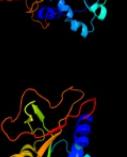
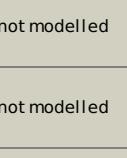


Phyre²

Email	i.a.kelley@imperial.ac.uk
Description	P76459
Date	Thu Jan 5 12:23:04 GMT 2012
Unique Job ID	97582052d2cc0be7

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d1ooya1			100.0	44	Fold: NagB/RpiA/CoA transferase-like Superfamily: NagB/RpiA/CoA transferase-like Family: CoA transferase beta subunit-like
2	c1ooyA_			100.0	44	PDB header: transferase Chain: A: PDB Molecule: succinyl-coa:3-ketoacid-coenzyme a transferase, PDBTitle: succinyl-coa:3-ketoacid coa transferase from pig heart
3	d2ahua1			100.0	28	Fold: NagB/RpiA/CoA transferase-like Superfamily: NagB/RpiA/CoA transferase-like Family: CoA transferase beta subunit-like
4	d1poib_			100.0	23	Fold: NagB/RpiA/CoA transferase-like Superfamily: NagB/RpiA/CoA transferase-like Family: CoA transferase beta subunit-like
5	c3cdkD_			100.0	54	PDB header: transferase Chain: D: PDB Molecule: succinyl-coa:3-ketoacid-coenzyme a transferase PDBTitle: crystal structure of the co-expressed succinyl-coa2 transferase a and b complex from bacillus subtilis
6	c2ahvC_			100.0	27	PDB header: transferase Chain: C: PDB Molecule: putative enzyme ydif; PDBTitle: crystal structure of acyl-coa transferase from e. coli o157:h7 (ydif)-2 thioester complex with coa- 1
7	c3gk7A_			100.0	24	PDB header: transferase Chain: A: PDB Molecule: 4-hydroxybutyrate coa-transferase; PDBTitle: crystal structure of 4-hydroxybutyrate coa-transferase from2 clostridium aminobutyricum
8	c2oasA_			100.0	21	PDB header: transferase Chain: A: PDB Molecule: 4-hydroxybutyrate coenzyme a transferase; PDBTitle: crystal structure of 4-hydroxybutyrate coenzyme a transferase (atoa)2 in complex with coa from shewanella oneidensis, northeast structural3 genomics target sor119.
9	c3eh7A_			100.0	20	PDB header: transferase Chain: A: PDB Molecule: 4-hydroxybutyrate coa-transferase; PDBTitle: the structure of a putative 4-hydroxybutyrate coa-transferase from2 porphyromonas gingivalis w83
10	c2g39A_			100.0	20	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: acetyl-coa hydrolase; PDBTitle: crystal structure of coenzyme a transferase from pseudomonas2 aeruginosa
11	c2nvvF_			100.0	16	PDB header: hydrolase Chain: F: PDB Molecule: acetyl-coa hydrolase/transferase family protein; PDBTitle: crystal structure of the putative acetyl-coa hydrolase/transferase2 pg1013 from porphyromonas gingivalis, northeast structural genomics3 target pgr16.

12	d2g39a2	Alignment		100.0	20	Fold: NagB/RpiA/CoA transferase-like Superfamily: NagB/RpiA/CoA transferase-like Family: CoA transferase alpha subunit-like
13	d1xr4a2	Alignment		100.0	18	Fold: NagB/RpiA/CoA transferase-like Superfamily: NagB/RpiA/CoA transferase-like Family: CoA transferase alpha subunit-like
14	c3d3uA	Alignment		100.0	25	PDB header: transferase Chain: A: PDB Molecule: 4-hydroxybutyrate coa-transferase; PDBTitle: crystal structure of 4-hydroxybutyrate coa-transferase (abft-2) from2 porphyromonas gingivalis. northeast structural genomics consortium3 target pgr26
15	c1xr4B	Alignment		99.9	17	PDB header: hydrolase/transferase Chain: B: PDB Molecule: putative citrate lyase alpha chain/citrate-acp transferase; PDBTitle: x-ray crystal structure of putative citrate lyase alpha chain/citrate-2 acp transferase [salmonella typhimurium]
16	c2hj0A	Alignment		99.9	17	PDB header: lyase Chain: A: PDB Molecule: putative citrate lyase, alfa subunit; PDBTitle: crystal structure of the putative alfa subunit of citrate lyase in2 complex with citrate from streptococcus mutans, northeast structural genomics target smr12 (casp target).
17	d1m0sa1	Alignment		99.7	14	Fold: NagB/RpiA/CoA transferase-like Superfamily: NagB/RpiA/CoA transferase-like Family: D-ribose-5-phosphate isomerase (RpiA), catalytic domain
18	d1lk5a1	Alignment		99.6	16	Fold: NagB/RpiA/CoA transferase-like Superfamily: NagB/RpiA/CoA transferase-like Family: D-ribose-5-phosphate isomerase (RpiA), catalytic domain
19	d1uj4a1	Alignment		99.6	15	Fold: NagB/RpiA/CoA transferase-like Superfamily: NagB/RpiA/CoA transferase-like Family: D-ribose-5-phosphate isomerase (RpiA), catalytic domain
20	c1m0sA	Alignment		99.5	20	PDB header: isomerase Chain: A: PDB Molecule: ribose-5-phosphate isomerase a; PDBTitle: northeast structural genomics consortium (nesg id ir21)
21	c3hheA	Alignment	not modelled	99.5	19	PDB header: isomerase Chain: A: PDB Molecule: ribose-5-phosphate isomerase a; PDBTitle: crystal structure of ribose-5-phosphate isomerase a from bartonellae2 henselae
22	c1lk5C	Alignment	not modelled	99.5	23	PDB header: isomerase Chain: C: PDB Molecule: d-ribose-5-phosphate isomerase; PDBTitle: structure of the d-ribose-5-phosphate isomerase from2 pyrococcus horikoshii
23	c1lkzB	Alignment	not modelled	99.5	20	PDB header: isomerase Chain: B: PDB Molecule: ribose 5-phosphate isomerase a; PDBTitle: crystal structure of d-ribose-5-phosphate isomerase (rpia)2 from escherichia coli.
24	c2f8mB	Alignment	not modelled	99.4	21	PDB header: isomerase Chain: B: PDB Molecule: ribose 5-phosphate isomerase; PDBTitle: ribose 5-phosphate isomerase from plasmodium falciparum
25	c3kwmC	Alignment	not modelled	99.4	22	PDB header: isomerase Chain: C: PDB Molecule: ribose-5-phosphate isomerase a; PDBTitle: crystal structure of ribose-5-isomerase a
26	c3l7oB	Alignment	not modelled	99.4	29	PDB header: isomerase Chain: B: PDB Molecule: ribose-5-phosphate isomerase a; PDBTitle: crystal structure of ribose-5-phosphate isomerase a from streptococcus2 mutans ua159
27	c1uj6A	Alignment	not modelled	99.3	15	PDB header: isomerase Chain: A: PDB Molecule: ribose 5-phosphate isomerase; PDBTitle: crystal structure of thermus thermophilus ribose-5-phosphate isomerase2 complexed with arabinose-5-phosphate
28	c2pjmA	Alignment	not modelled	99.3	19	PDB header: isomerase Chain: A: PDB Molecule: ribose-5-phosphate isomerase a; PDBTitle: structure of ribose 5-phosphate isomerase a from2 methanocaldococcus jannaschii
						PDB header: isomerase

29	c3u7jA	Alignment	not modelled	98.4	17	Chain: A: PDB Molecule: ribose-5-phosphate isomerase a; PDBTitle: crystal structure of ribose-5-phosphate isomerase a from burkholderia2 thailandensis PDB header: transferase
30	c3cdkA	Alignment	not modelled	98.3	18	Chain: A: PDB Molecule: succinyl-coa:3-ketoacid-coenzyme a transferase PDBTitle: crystal structure of the co-expressed succinyl-coa2 transferase a and b complex from bacillus subtilis PDB header: isomerase
31	c1xtzA	Alignment	not modelled	98.1	23	Chain: A: PDB Molecule: ribose-5-phosphate isomerase; PDBTitle: crystal structure of the s. cerevisiae d-ribose-5-phosphate isomerase:2 comparison with the archeal and bacterial enzymes
32	d1k6da	Alignment	not modelled	98.1	19	Fold: NagB/RpiA/CoA transferase-like Superfamily: NagB/RpiA/CoA transferase-like Family: CoA transferase alpha subunit-like
33	c3rrlC	Alignment	not modelled	98.1	21	PDB header: transferase Chain: C: PDB Molecule: succinyl-coa:3-ketoacid-coenzyme a transferase subunit a; PDBTitle: complex structure of 3-oxoadipate coa-transferase subunit a and b from2 helicobacter pylori 26695
34	d1poia	Alignment	not modelled	97.9	19	Fold: NagB/RpiA/CoA transferase-like Superfamily: NagB/RpiA/CoA transferase-like Family: CoA transferase alpha subunit-like
35	d1ooya2	Alignment	not modelled	97.9	24	Fold: NagB/RpiA/CoA transferase-like Superfamily: NagB/RpiA/CoA transferase-like Family: CoA transferase alpha subunit-like
36	d1o8bb1	Alignment	not modelled	97.7	17	Fold: NagB/RpiA/CoA transferase-like Superfamily: NagB/RpiA/CoA transferase-like Family: D-ribose-5-phosphate isomerase (RpiA), catalytic domain
37	d1t9ka	Alignment	not modelled	97.7	19	Fold: NagB/RpiA/CoA transferase-like Superfamily: NagB/RpiA/CoA transferase-like Family: IF2B-like
38	c2yvkA	Alignment	not modelled	97.6	15	PDB header: isomerase Chain: A: PDB Molecule: methylthioribose-1-phosphate isomerase; PDBTitle: crystal structure of 5-methylthioribose 1-phosphate2 isomerase product complex from bacillus subtilis
39	d1t5oa	Alignment	not modelled	97.5	19	Fold: NagB/RpiA/CoA transferase-like Superfamily: NagB/RpiA/CoA transferase-like Family: IF2B-like
40	d2ahu2	Alignment	not modelled	97.4	23	Fold: NagB/RpiA/CoA transferase-like Superfamily: NagB/RpiA/CoA transferase-like Family: CoA transferase alpha subunit-like
41	c3a11D	Alignment	not modelled	97.4	15	PDB header: isomerase Chain: D: PDB Molecule: translation initiation factor eif-2b, delta PDBTitle: crystal structure of ribose-1,5-bisphosphate isomerase from2 thermococcus kodakaraensis kod1
42	d1vb5a	Alignment	not modelled	97.1	13	Fold: NagB/RpiA/CoA transferase-like Superfamily: NagB/RpiA/CoA transferase-like Family: IF2B-like
43	c3ecsD	Alignment	not modelled	96.8	15	PDB header: translation Chain: D: PDB Molecule: translation initiation factor eif-2b subunit PDBTitle: crystal structure of human eif2b alpha
44	d2g39a1	Alignment	not modelled	96.8	18	Fold: NagB/RpiA/CoA transferase-like Superfamily: NagB/RpiA/CoA transferase-like Family: CoA transferase alpha subunit-like
45	d1xr4a1	Alignment	not modelled	96.7	24	Fold: NagB/RpiA/CoA transferase-like Superfamily: NagB/RpiA/CoA transferase-like Family: CoA transferase alpha subunit-like
46	d2a0ua1	Alignment	not modelled	95.3	16	Fold: NagB/RpiA/CoA transferase-like Superfamily: NagB/RpiA/CoA transferase-like Family: IF2B-like
47	d3efba1	Alignment	not modelled	84.1	17	Fold: NagB/RpiA/CoA transferase-like Superfamily: NagB/RpiA/CoA transferase-like Family: SorC sugar-binding domain-like
48	d1o8ba1	Alignment	not modelled	82.6	19	Fold: NagB/RpiA/CoA transferase-like Superfamily: NagB/RpiA/CoA transferase-like Family: D-ribose-5-phosphate isomerase (RpiA), catalytic domain
49	c2w48D	Alignment	not modelled	78.9	13	PDB header: transcription Chain: D: PDB Molecule: sorbitol operon regulator; PDBTitle: crystal structure of the full-length sorbitol operon2 regulator sorc from klebsiella pneumoniae
50	c3kv1A	Alignment	not modelled	72.3	16	PDB header: transcription Chain: A: PDB Molecule: transcriptional repressor; PDBTitle: crystal structure of putative sugar-binding domain of transcriptional2 repressor from vibrio fischeri
51	c3nzeB	Alignment	not modelled	70.8	17	PDB header: transcription regulator Chain: B: PDB Molecule: putative transcriptional regulator, sugar-binding family; PDBTitle: the crystal structure of a domain of a possible sugar-binding2 transcriptional regulator from arthrobacter aurescens tc1.
52	c1w2wj	Alignment	not modelled	70.6	18	PDB header: isomerase Chain: J: PDB Molecule: 5-methylthioribose-1-phosphate isomerase; PDBTitle: crystal structure of yeast ypr118w, a methylthioribose-1-2 phosphate isomerase related to regulatory eif2b subunits
53	d1eg2a	Alignment	not modelled	61.8	29	Fold: S-adenosyl-L-methionine-dependent methyltransferases Superfamily: S-adenosyl-L-methionine-dependent methyltransferases Family: Type II DNA methylase
54	c1nw6A	Alignment	not modelled	52.8	29	PDB header: transferase Chain: A: PDB Molecule: modification methylase rs1; PDBTitle: structure of the beta class n6-adenine dna

						methyltransferase rsr2 bound to sinefungin
55	c2jcbA	Alignment	not modelled	48.0	17	PDB header: ligase Chain: A: PDB Molecule: 5-formyltetrahydrofolate cyclo-ligase family protein; PDBTitle: the crystal structure of 5-formyl-tetrahydrofolate2 cycloligase from bacillus anthracis (ba4489)
56	d1booa	Alignment	not modelled	46.8	19	Fold: S-adenosyl-L-methionine-dependent methyltransferases Superfamily: S-adenosyl-L-methionine-dependent methyltransferases Family: Type II DNA methylase
57	d1wkca	Alignment	not modelled	46.7	20	Fold: NagB/RpiA/CoA transferase-like Superfamily: NagB/RpiA/CoA transferase-like Family: Methyltetrahydrofolate synthetase
58	d1soua	Alignment	not modelled	39.5	25	Fold: NagB/RpiA/CoA transferase-like Superfamily: NagB/RpiA/CoA transferase-like Family: Methyltetrahydrofolate synthetase
59	c2zifB	Alignment	not modelled	37.5	26	PDB header: transferase Chain: B: PDB Molecule: putative modification methylase; PDBTitle: crystal structure of ttha0409, putative dna modification2 methylase from thermus thermophilus hb8- complexed with s-3 adenosyl-l-methionine
60	d2gnpa1	Alignment	not modelled	34.4	11	Fold: NagB/RpiA/CoA transferase-like Superfamily: NagB/RpiA/CoA transferase-like Family: SorC sugar-binding domain-like
61	c2z1dA	Alignment	not modelled	31.7	26	PDB header: metal binding protein Chain: A: PDB Molecule: hydrogenase expression/formation protein hydP; PDBTitle: crystal structure of [nife] hydrogenase maturation protein, hydP from2 thermococcus kodakaraensis
62	d1ovma3	Alignment	not modelled	28.2	18	Fold: Thiamin diphosphate-binding fold (THDP-binding) Superfamily: Thiamin diphosphate-binding fold (THDP-binding) Family: Pyruvate oxidase and decarboxylase PP module
63	d2r5fa1	Alignment	not modelled	27.0	17	Fold: NagB/RpiA/CoA transferase-like Superfamily: NagB/RpiA/CoA transferase-like Family: SorC sugar-binding domain-like
64	c3fhF	Alignment	not modelled	21.7	12	PDB header: transferase Chain: F: PDB Molecule: phosphotransferase system, mannose/fructose-specific PDBTitle: crystal structure of manxa from thermoanaerobacter tengcongensis
65	c3b4uB	Alignment	not modelled	21.3	12	PDB header: lyase Chain: B: PDB Molecule: dihydrodipicolinate synthase; PDBTitle: crystal structure of dihydrodipicolinate synthase from agrobacterium2 tumefaciens str. c58
66	d1zpda3	Alignment	not modelled	21.3	20	Fold: Thiamin diphosphate-binding fold (THDP-binding) Superfamily: Thiamin diphosphate-binding fold (THDP-binding) Family: Pyruvate oxidase and decarboxylase PP module
67	c1ydmC	Alignment	not modelled	20.0	21	PDB header: structural genomics, unknown function Chain: C: PDB Molecule: hypothetical protein yqgn; PDBTitle: x-ray structure of northeast structural genomics target sr44
68	c3na8A	Alignment	not modelled	17.0	0	PDB header: lyase Chain: A: PDB Molecule: putative dihydrodipicolinate synthetase; PDBTitle: crystal structure of a putative dihydrodipicolinate synthetase from2 pseudomonas aeruginosa
69	c3g0sA	Alignment	not modelled	16.9	10	PDB header: lyase Chain: A: PDB Molecule: dihydrodipicolinate synthase; PDBTitle: dihydrodipicolinate synthase from salmonella typhimurium lt2
70	c3si9B	Alignment	not modelled	16.5	13	PDB header: lyase Chain: B: PDB Molecule: dihydrodipicolinate synthase; PDBTitle: crystal structure of dihydrodipicolinate synthase from bartonella2 henselae
71	d1pvda3	Alignment	not modelled	15.2	16	Fold: Thiamin diphosphate-binding fold (THDP-binding) Superfamily: Thiamin diphosphate-binding fold (THDP-binding) Family: Pyruvate oxidase and decarboxylase PP module
72	c2o0mA	Alignment	not modelled	14.8	17	PDB header: transcription Chain: A: PDB Molecule: transcriptional regulator, sorc family; PDBTitle: the crystal structure of the putative sorc family transcription2 regulator from enterococcus faecalis
73	d2o0ma1	Alignment	not modelled	14.8	17	Fold: NagB/RpiA/CoA transferase-like Superfamily: NagB/RpiA/CoA transferase-like Family: SorC sugar-binding domain-like
74	c3noeA	Alignment	not modelled	14.3	15	PDB header: lyase Chain: A: PDB Molecule: dihydrodipicolinate synthase; PDBTitle: crystal structure of dihydrodipicolinate synthase from pseudomonas2 aeruginosa
75	d2a6na1	Alignment	not modelled	14.1	10	Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: Class I aldolase
76	c3iprC	Alignment	not modelled	13.8	18	PDB header: transferase Chain: C: PDB Molecule: pts system, iia component; PDBTitle: crystal structure of the enterococcus faecalis gluconate2 specific eiia phosphotransferase system component
77	d1pdoa	Alignment	not modelled	13.5	9	Fold: PTS system fructose IIA component-like Superfamily: PTS system fructose IIA component-like Family: EIIA-man component-like
78	c2vc6A	Alignment	not modelled	13.2	8	PDB header: lyase Chain: A: PDB Molecule: dihydrodipicolinate synthase; PDBTitle: structure of mosa from s. meliloti with pyruvate bound
79	c3bi8A	Alignment	not modelled	13.1	13	PDB header: lyase Chain: A: PDB Molecule: dihydrodipicolinate synthase; PDBTitle: structure of dihydrodipicolinate synthase from clostridium2 botulinum
						PDB header: transferase

80	c3mtqA		Alignment	not modelled	13.0	28	Chain: A: PDB Molecule: putative phosphoenolpyruvate-dependent sugar PDBTitle: crystal structure of a putative phosphoenolpyruvate-dependent sugar2 phosphotransferase system (pts) permease (kpn_04802) from klebsiella3 pneumoniae subsp. pneumoniae mgh 78578 at 1.70 a resolution
81	c3cprB		Alignment	not modelled	12.9	15	PDB header: lyase Chain: B: PDB Molecule: dihydrodipicolinate synthetase; PDBTitle: the crystal structure of corynebacterium glutamicum2 dihydrodipicolinate synthase to 2.2 a resolution
82	c2ri0B		Alignment	not modelled	12.8	20	PDB header: hydrolase Chain: B: PDB Molecule: glucosamine-6-phosphate deaminase; PDBTitle: crystal structure of glucosamine 6-phosphate deaminase (nagb) from s.2 mutans
83	c3pueA		Alignment	not modelled	12.5	5	PDB header: lyase Chain: A: PDB Molecule: dihydrodipicolinate synthase; PDBTitle: crystal structure of the complex of dhydrodipicolinate synthase from2 acinetobacter baumannii with lysine at 2.6a resolution
84	d2okga1		Alignment	not modelled	12.5	17	Fold: NagB/RpiA/CoA transferase-like Superfamily: NagB/RpiA/CoA transferase-like Family: SorC sugar-binding domain-like
85	c2r8wb		Alignment	not modelled	11.8	18	PDB header: lyase Chain: B: PDB Molecule: agr_c_1641p; PDBTitle: the crystal structure of dihydrodipicolinate synthase (atu0899) from2 agrobacterium tumefaciens str. c58
86	c2ehhE		Alignment	not modelled	11.6	11	PDB header: lyase Chain: E: PDB Molecule: dihydrodipicolinate synthase; PDBTitle: crystal structure of dihydrodipicolinate synthase from2 aquifex aeolicus
87	c3fluD		Alignment	not modelled	11.1	11	PDB header: lyase Chain: D: PDB Molecule: dihydrodipicolinate synthase; PDBTitle: crystal structure of dihydrodipicolinate synthase from the pathogen2 neisseria meningitidis
88	d1xkyal		Alignment	not modelled	10.8	22	Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: Class I aldolase
89	c2k4mA		Alignment	not modelled	10.3	20	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: upf0146 protein mth_1000; PDBTitle: solution nmr structure of m. thermoautotrophicum protein2 mth_1000, northeast structural genomics consortium target3 tr8
90	c2cdqB		Alignment	not modelled	9.9	20	PDB header: transferase Chain: B: PDB Molecule: aspartokinase; PDBTitle: crystal structure of arabidopsis thaliana aspartate kinase2 complexed with lysine and s-adenosylmethionine
91	c3d0cB		Alignment	not modelled	9.3	20	PDB header: lyase Chain: B: PDB Molecule: dihydrodipicolinate synthase; PDBTitle: crystal structure of dihydrodipicolinate synthase from2 oceanobacillus iheyensis at 1.9 a resolution
92	d1gpea1		Alignment	not modelled	9.0	40	Fold: FAD/NAD(P)-binding domain Superfamily: FAD/NAD(P)-binding domain Family: FAD-linked reductases, N-terminal domain
93	c3hdql		Alignment	not modelled	8.7	23	PDB header: isomerase Chain: I: PDB Molecule: udp-galactopyranose mutase; PDBTitle: crystal structure of udp-galactopyranose mutase (oxidized2 form) in complex with substrate
94	d1hl2a		Alignment	not modelled	8.6	11	Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: Class I aldolase
95	c3hy4A		Alignment	not modelled	8.3	23	PDB header: ligase Chain: A: PDB Molecule: 5-formyltetrahydrofolate cyclo-ligase; PDBTitle: structure of human mthfs with n5-iminium phosphate
96	d1f74a		Alignment	not modelled	8.3	17	Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: Class I aldolase
97	c2yxgD		Alignment	not modelled	8.1	11	PDB header: lyase Chain: D: PDB Molecule: dihydrodipicolinate synthase; PDBTitle: crystal structure of dihydrodipicolinate synthase (dapa)
98	c3lciA		Alignment	not modelled	8.0	11	PDB header: lyase Chain: A: PDB Molecule: n-acetylneuraminate lyase; PDBTitle: the d-sialic acid aldolase mutant v251w
99	c2faob		Alignment	not modelled	7.8	5	PDB header: hydrolase/transferase Chain: B: PDB Molecule: probable atp-dependent dna ligase; PDBTitle: crystal structure of pseudomonas aeruginosa ligd polymerase2 domain