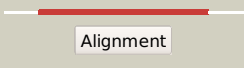

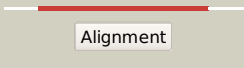

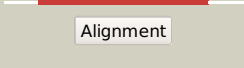

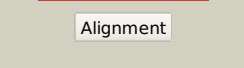

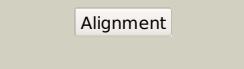

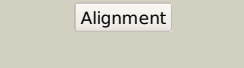

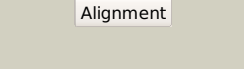

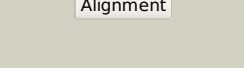

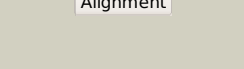

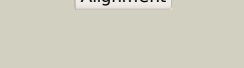

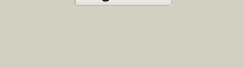



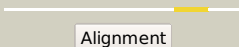

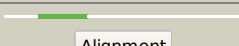
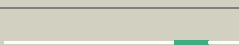
Phyre2

Email	mdejesus@rockefeller.edu
Description	RVBD3618 (-) _4058877_4060064
Date	Fri Aug 9 18:20:30 BST 2019
Unique Job ID	4b29a0ffa58394b3

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d1luca_	 Alignment		100.0	22	Fold: TIM beta/alpha-barrel Superfamily: Bacterial luciferase-like Family: Bacterial luciferase (alkanal monooxygenase)
2	c2wgkA	 Alignment		100.0	25	PDB header: oxidoreductase Chain: A; PDB Molecule: 3,6-diketocamphane 1,6 monooxygenase; PDBTitle: type ii baeyer-villiger monooxygenase oxygenating2 constituent of 3,6-diketocamphane 1,6 monooxygenase from3 pseudomonas putida
3	c2i7gA	 Alignment		100.0	21	PDB header: oxidoreductase Chain: A; PDB Molecule: monooxygenase; PDBTitle: crystal structure of monooxygenase from agrobacterium tumefaciens
4	d1lucb	 Alignment		100.0	17	Fold: TIM beta/alpha-barrel Superfamily: Bacterial luciferase-like Family: Bacterial luciferase (alkanal monooxygenase)
5	c6friD	 Alignment		100.0	17	PDB header: oxidoreductase Chain: D; PDB Molecule: alkanal monooxygenase beta chain; PDBTitle: structure of luxb from photobacterium leiognathi
6	c5tlcA	 Alignment		100.0	21	PDB header: oxidoreductase Chain: A; PDB Molecule: dibenzothiophene desulfurization enzyme a; PDBTitle: crystal structure of bdsa from bacillus subtilis wu-s2b
7	d1tvla	 Alignment		100.0	18	Fold: TIM beta/alpha-barrel Superfamily: Bacterial luciferase-like Family: Ssud-like monooxygenases
8	c1tvIA	 Alignment		100.0	18	PDB header: oxidoreductase Chain: A; PDB Molecule: protein ytnj; PDBTitle: structure of ytnj from bacillus subtilis
9	c3raoB	 Alignment		100.0	16	PDB header: structural genomics, unknown function Chain: B; PDB Molecule: putative luciferase-like monooxygenase; PDBTitle: crystal structure of the luciferase-like monooxygenase from bacillus2 cereus atcc 10987.
10	c3sdoB	 Alignment		100.0	20	PDB header: oxidoreductase Chain: B; PDB Molecule: nitrotriacetate monooxygenase; PDBTitle: structure of a nitrotriacetate monooxygenase from burkholderia2 pseudomallei
11	d1ezwa	 Alignment		100.0	22	Fold: TIM beta/alpha-barrel Superfamily: Bacterial luciferase-like Family: F420 dependent oxidoreductases

12	c3b9nB_	Alignment		100.0	21	PDB header: oxidoreductase Chain: B: PDB Molecule: alkane monooxygenase; PDBTitle: crystal structure of long-chain alkane monooxygenase (lada)
13	c5w4zA_	Alignment		100.0	20	PDB header: flavoprotein Chain: A: PDB Molecule: riboflavin lyase; PDBTitle: crystal structure of riboflavin lyase (rcae) with modified fmn and2 substrate riboflavin
14	c5dqpa_	Alignment		100.0	16	PDB header: oxidoreductase Chain: A: PDB Molecule: edta monooxygenase; PDBTitle: edta monooxygenase (emoa) from chelativorans sp. bnc1
15	c1z69D_	Alignment		100.0	19	PDB header: oxidoreductase Chain: D: PDB Molecule: coenzyme f420-dependent n(5),n(10)- PDBTitle: crystal structure of methylenetetrahydromethanopterin2 reductase (mer) in complex with coenzyme f420
16	d1nqka_	Alignment		100.0	18	Fold: TIM beta/alpha-barrel Superfamily: Bacterial luciferase-like Family: Ssud-like monooxygenases
17	c5wanA_	Alignment		100.0	18	PDB header: oxidoreductase Chain: A: PDB Molecule: pyrimidine monooxygenase ruta; PDBTitle: crystal structure of a flavoenzyme ruta in the pyrimidine catabolic2 pathway
18	c6ak1B_	Alignment		100.0	22	PDB header: oxidoreductase Chain: B: PDB Molecule: dimethyl-sulfide monooxygenase; PDBTitle: crystal structure of dmoa from hyphomicrobium sulfonivorans
19	d1f07a_	Alignment		100.0	21	Fold: TIM beta/alpha-barrel Superfamily: Bacterial luciferase-like Family: F420 dependent oxidoreductases
20	c3c8nB_	Alignment		100.0	22	PDB header: oxidoreductase Chain: B: PDB Molecule: probable f420-dependent glucose-6-phosphate dehydrogenase PDBTitle: crystal structure of apo-fgd1 from mycobacterium tuberculosis
21	d1rhca_	Alignment	not modelled	100.0	19	Fold: TIM beta/alpha-barrel Superfamily: Bacterial luciferase-like Family: F420 dependent oxidoreductases
22	c2b81D_	Alignment	not modelled	100.0	18	PDB header: oxidoreductase Chain: D: PDB Molecule: luciferase-like monooxygenase; PDBTitle: crystal structure of the luciferase-like monooxygenase from bacillus2 cereus
23	d1nfpa_	Alignment	not modelled	100.0	18	Fold: TIM beta/alpha-barrel Superfamily: Bacterial luciferase-like Family: Non-fluorescent flavoprotein (luxF, FP390)
24	d1fvpa_	Alignment	not modelled	99.7	11	Fold: TIM beta/alpha-barrel Superfamily: Bacterial luciferase-like Family: Non-fluorescent flavoprotein (luxF, FP390)
25	c4xkyC_	Alignment	not modelled	88.2	10	PDB header: lyase Chain: C: PDB Molecule: dihydrodipicolinate synthase; PDBTitle: structure of dihydrodipicolinate synthase from the commensal bacterium2 bacteroides thetaiotaomicron at 2.1 a resolution
26	c2infB_	Alignment	not modelled	83.9	6	PDB header: lyase Chain: B: PDB Molecule: uroporphyrinogen decarboxylase; PDBTitle: crystal structure of uroporphyrinogen decarboxylase from bacillus2 subtilis
27	d1r3sa_	Alignment	not modelled	79.0	20	Fold: TIM beta/alpha-barrel Superfamily: UROD/MetE-like Family: Uroporphyrinogen decarboxylase, UROD
28	c4exqA_	Alignment	not modelled	78.8	11	PDB header: biosynthetic protein Chain: A: PDB Molecule: uroporphyrinogen decarboxylase; PDBTitle: crystal structure of uroporphyrinogen decarboxylase (upd) from2 burkholderia thailandensis e264

29	c2ejaB	 Alignment	not modelled	78.7	11	PDB header: lyase Chain: B: PDB Molecule: uroporphyrinogen decarboxylase; PDBTitle: crystal structure of uroporphyrinogen decarboxylase from2 aquifex aeolicus
30	c3b4uB	 Alignment	not modelled	77.0	14	PDB header: lyase Chain: B: PDB Molecule: dihydrodipicolinate synthase; PDBTitle: crystal structure of dihydrodipicolinate synthase from agrobacterium2 tumefaciens str. c58
31	d1j93a	 Alignment	not modelled	74.2	13	Fold: TIM beta/alpha-barrel Superfamily: UROD/MetE-like Family: Uroporphyrinogen decarboxylase, UROD
32	c1jpkA	 Alignment	not modelled	73.8	13	PDB header: lyase Chain: A: PDB Molecule: uroporphyrinogen decarboxylase; PDBTitle: gly156asp mutant of human urod, human uroporphyrinogen iii2 decarboxylase
33	c3cyvA	 Alignment	not modelled	72.5	13	PDB header: lyase Chain: A: PDB Molecule: uroporphyrinogen decarboxylase; PDBTitle: crystal structure of uroporphyrinogen decarboxylase from2 shigella flexineri: new insights into its catalytic3 mechanism
34	c3qy6A	 Alignment	not modelled	72.1	24	PDB header: hydrolase Chain: A: PDB Molecule: tyrosine-protein phosphatase ywqe; PDBTitle: crystal structures of ywqe from bacillus subtilis and cpsb from2 streptococcus pneumoniae, unique metal-dependent tyrosine3 phosphatases
35	c4uxdC	 Alignment	not modelled	62.7	8	PDB header: lyase Chain: C: PDB Molecule: 2-dehydro-3-deoxy-d-gluconate/2-dehydro-3-deoxy- PDBTitle: 2-keto 3-deoxygluconate aldolase from picrophilus torridus
36	c3d0cB	 Alignment	not modelled	62.5	14	PDB header: lyase Chain: B: PDB Molecule: dihydrodipicolinate synthase; PDBTitle: crystal structure of dihydrodipicolinate synthase from oceanobacillus2 iheyensis at 1.9 a resolution
37	c2w1vA	 Alignment	not modelled	59.5	16	PDB header: hydrolase Chain: A: PDB Molecule: nitrilase homolog 2; PDBTitle: crystal structure of mouse nitrilase-2 at 1.4a resolution
38	c4zr8B	 Alignment	not modelled	59.4	11	PDB header: lyase Chain: B: PDB Molecule: uroporphyrinogen decarboxylase; PDBTitle: structure of uroporphyrinogen decarboxylase from acinetobacter2 baumannii
39	c5ud6B	 Alignment	not modelled	58.7	14	PDB header: lyase Chain: B: PDB Molecule: dihydrodipicolinate synthase; PDBTitle: crystal structure of dhps from cyanidioschyzon merolae with lysine2 bound
40	c3lciA	 Alignment	not modelled	58.1	13	PDB header: lyase Chain: A: PDB Molecule: n-acetylneuraminatase lyase; PDBTitle: the d-sialic acid aldolase mutant v251w
41	c3si9B	 Alignment	not modelled	56.4	10	PDB header: lyase Chain: B: PDB Molecule: dihydrodipicolinate synthase; PDBTitle: crystal structure of dihydrodipicolinate synthase from bartonella2 henselae
42	c3vniC	 Alignment	not modelled	54.3	13	PDB header: isomerase Chain: C: PDB Molecule: xylose isomerase domain protein tim barrel; PDBTitle: crystal structures of d-psicose 3-epimerase from clostridium2 cellulolyticum h10 and its complex with ketohexose sugars
43	d1xkya1	 Alignment	not modelled	53.4	11	Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: Class I aldolase
44	c6h4eB	 Alignment	not modelled	52.4	15	PDB header: lyase Chain: B: PDB Molecule: putative n-acetylneuraminatase lyase; PDBTitle: proteus mirabilis n-acetylneuraminatase lyase
45	c3cprB	 Alignment	not modelled	52.2	14	PDB header: lyase Chain: B: PDB Molecule: dihydrodipicolinate synthetase; PDBTitle: the crystal structure of corynebacterium glutamicum2 dihydrodipicolinate synthase to 2.2 a resolution
46	c3eb2A	 Alignment	not modelled	51.4	16	PDB header: lyase Chain: A: PDB Molecule: putative dihydrodipicolinate synthetase; PDBTitle: crystal structure of dihydrodipicolinate synthase from2 rhodospseudomonas palustris at 2.0a resolution
47	c1ypxA	 Alignment	not modelled	49.4	14	PDB header: transferase Chain: A: PDB Molecule: putative vitamin-b12 independent methionine synthase family PDBTitle: crystal structure of the putative vitamin-b12 independent methionine2 synthase from listeria monocytogenes, northeast structural genomics3 target lmr13
48	c2a7nA	 Alignment	not modelled	48.8	13	PDB header: oxidoreductase Chain: A: PDB Molecule: l(+)-mandelate dehydrogenase; PDBTitle: crystal structure of the g81a mutant of the active chimera of (s)-2 mandelate dehydrogenase
49	c2yxgD	 Alignment	not modelled	48.6	11	PDB header: lyase Chain: D: PDB Molecule: dihydrodipicolinate synthase; PDBTitle: crystal structure of dihydrodipicolinate synthase (dapa)
50	c4i7vD	 Alignment	not modelled	48.4	11	PDB header: biosynthetic protein Chain: D: PDB Molecule: dihydrodipicolinate synthase; PDBTitle: agrobacterium tumefaciens dhps with pyruvate
51	d1p4ca	 Alignment	not modelled	48.4	13	Fold: TIM beta/alpha-barrel Superfamily: FMN-linked oxidoreductases Family: FMN-linked oxidoreductases
52	d1hl2a	 Alignment	not modelled	46.9	13	Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: Class I aldolase
53	c5k9hA	 Alignment	not modelled	45.6	18	PDB header: hydrolase Chain: A: PDB Molecule: 0940_gh29; PDBTitle: crystal structure of a glycoside hydrolase 29 family member from an2 unknown rumen bacterium

54	c3kwsB	Alignment	not modelled	44.7	16	PDB header: isomerase Chain: B: PDB Molecule: putative sugar isomerase; PDBTitle: crystal structure of putative sugar isomerase (yp_001305149.1) from2 parabacteroides distazonis atcc 8503 at 1.68 a resolution
55	c3noeA	Alignment	not modelled	44.0	8	PDB header: lyase Chain: A: PDB Molecule: dihydrodipicolinate synthase; PDBTitle: crystal structure of dihydrodipicolinate synthase from pseudomonas2 aeruginosa
56	c3lerA	Alignment	not modelled	43.9	16	PDB header: lyase Chain: A: PDB Molecule: dihydrodipicolinate synthase; PDBTitle: crystal structure of dihydrodipicolinate synthase from campylobacter2 jejuni subsp. jejuni nctc 11168
57	c2v9dB	Alignment	not modelled	42.1	12	PDB header: lyase Chain: B: PDB Molecule: yage; PDBTitle: crystal structure of yage, a prophage protein belonging to2 the dihydrodipicolinic acid synthase family from e. coli3 k12
58	d1f74a	Alignment	not modelled	39.7	16	Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: Class I aldolase
59	c3pueA	Alignment	not modelled	39.3	11	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
60	c4dppB	Alignment	not modelled	37.3	10	PDB header: lyase Chain: B: PDB Molecule: dihydrodipicolinate synthase 2, chloroplastic; PDBTitle: the structure of dihydrodipicolinate synthase 2 from arabidopsis2 thaliana
61	c3ilvA	Alignment	not modelled	36.6	14	PDB header: ligase Chain: A: PDB Molecule: glutamine-dependent nad(+) synthetase; PDBTitle: crystal structure of a glutamine-dependent nad(+) synthetase2 from cytophaga hutchinsonii
62	c2ehhE	Alignment	not modelled	36.5	11	PDB header: lyase Chain: E: PDB Molecule: dihydrodipicolinate synthase; PDBTitle: crystal structure of dihydrodipicolinate synthase from2 aquifex aeolicus
63	c3s5oA	Alignment	not modelled	36.1	9	PDB header: lyase Chain: A: PDB Molecule: 4-hydroxy-2-oxoglutarate aldolase, mitochondrial; PDBTitle: crystal structure of human 4-hydroxy-2-oxoglutarate aldolase bound to2 pyruvate
64	c4ah7C	Alignment	not modelled	35.2	13	PDB header: lyase Chain: C: PDB Molecule: n-acetylneuraminate lyase; PDBTitle: structure of wild type staphylococcus aureus n-acetylneuraminic acid2 lyase in complex with pyruvate
65	c3na8A	Alignment	not modelled	35.0	13	PDB header: lyase Chain: A: PDB Molecule: putative dihydrodipicolinate synthetase; PDBTitle: crystal structure of a putative dihydrodipicolinate synthetase from2 pseudomonas aeruginosa
66	c2wjeA	Alignment	not modelled	34.4	13	PDB header: hydrolase Chain: A: PDB Molecule: tyrosine-protein phosphatase cpsb; PDBTitle: crystal structure of the tyrosine phosphatase cps4b from2 steptococcus pneumoniae tigr4.
67	c5afdA	Alignment	not modelled	32.8	15	PDB header: lyase Chain: A: PDB Molecule: n-acetylneuraminate lyase; PDBTitle: native structure of n-acetylneuramininate lyase (sialic acid aldolase)2 from aliivibrio salmonicida
68	d1r46a2	Alignment	not modelled	32.6	18	Fold: TIM beta/alpha-barrel Superfamily: (Trans)glycosidases Family: Amylase, catalytic domain
69	c3e96B	Alignment	not modelled	32.5	12	PDB header: lyase Chain: B: PDB Molecule: dihydrodipicolinate synthase; PDBTitle: crystal structure of dihydrodipicolinate synthase from bacillus2 clausii
70	c3dz1A	Alignment	not modelled	32.4	12	PDB header: lyase Chain: A: PDB Molecule: dihydrodipicolinate synthase; PDBTitle: crystal structure of dihydrodipicolinate synthase from2 rhodopseudomonas palustris at 1.87a resolution
71	c4nq1B	Alignment	not modelled	32.1	9	PDB header: lyase Chain: B: PDB Molecule: 4-hydroxy-tetrahydrodipicolinate synthase; PDBTitle: legionella pneumophila dihydrodipicolinate synthase with first2 substrate pyruvate bound in the active site
72	d1f89a	Alignment	not modelled	32.0	11	Fold: Carbon-nitrogen hydrolase Superfamily: Carbon-nitrogen hydrolase Family: Nitrilase
73	c5c54D	Alignment	not modelled	31.7	13	PDB header: lyase Chain: D: PDB Molecule: dihydrodipicolinate synthase/n-acetylneuraminate lyase; PDBTitle: crystal structure of a novel n-acetylneuraminic acid lyase from2 corynebacterium glutamicum
74	c4ay8B	Alignment	not modelled	31.1	16	PDB header: transferase Chain: B: PDB Molecule: methylcobalamin): coenzyme m methyltransferase; PDBTitle: semet-derivative of a methyltransferase from m. mazei
75	c3lmzA	Alignment	not modelled	30.8	15	PDB header: isomerase Chain: A: PDB Molecule: putative sugar isomerase; PDBTitle: crystal structure of putative sugar isomerase. (yp_001305105.1) from2 parabacteroides distazonis atcc 8503 at 1.44 a resolution
76	c3bh1A	Alignment	not modelled	30.7	30	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: upf0371 protein dip2346; PDBTitle: crystal structure of protein dip2346 from corynebacterium diphtheriae
77	c4lsbA	Alignment	not modelled	29.3	7	PDB header: lyase Chain: A: PDB Molecule: lyase/mutase; PDBTitle: crystal structure of a putative lyase/mutase from burkholderia2 cenocepacia j2315
						PDB header: hydrolase Chain: A: PDB Molecule: f5/8 type c domain protein;

78	c4zrxA_	Alignment	not modelled	29.3	17	PDBTitle: crystal structure of a putative alpha-l-fucosidase (bacova_04357) from <i>Bacteroides ovatus</i> atcc 8483 at 1.59 a resolution
79	c3dcpB_	Alignment	not modelled	28.6	37	PDB header: hydrolase Chain: B: PDB Molecule: histidinol-phosphatase; PDBTitle: crystal structure of the putative histidinol phosphatase hsk from <i>Listeria monocytogenes</i> . northeast structural genomics consortium3 target lmr141.
80	c4k3zA_	Alignment	not modelled	28.4	8	PDB header: oxidoreductase Chain: A: PDB Molecule: d-erythrulose 4-phosphate dehydrogenase; PDBTitle: crystal structure of d-erythrulose 4-phosphate dehydrogenase from <i>Brucella melitensis</i> , solved by iodide sad
81	c3fluD_	Alignment	not modelled	27.8	8	PDB header: lyase Chain: D: PDB Molecule: dihydrodipicolinate synthase; PDBTitle: crystal structure of dihydrodipicolinate synthase from the pathogen <i>Neisseria meningitidis</i>
82	d1hl9a2	Alignment	not modelled	27.6	32	Fold: TIM beta/alpha-barrel Superfamily: (Trans)glycosidases Family: Putative alpha-L-fucosidase, catalytic domain
83	c3bi8A_	Alignment	not modelled	27.3	9	PDB header: lyase Chain: A: PDB Molecule: dihydrodipicolinate synthase; PDBTitle: structure of dihydrodipicolinate synthase from <i>Clostridium botulinum</i>
84	c3wqoB_	Alignment	not modelled	26.7	19	PDB header: unknown function Chain: B: PDB Molecule: uncharacterized protein mj1311; PDBTitle: crystal structure of d-tagatose 3-epimerase-like protein
85	c2qw5B_	Alignment	not modelled	26.6	22	PDB header: isomerase Chain: B: PDB Molecule: xylose isomerase-like tim barrel; PDBTitle: crystal structure of a putative sugar phosphate isomerase/epimerase2 (ava4194) from <i>Anabaena variabilis</i> atcc 29413 at 1.78 a resolution
86	c6k0aC_	Alignment	not modelled	26.5	15	PDB header: rna binding protein/rna Chain: C: PDB Molecule: ribonuclease p protein component 3; PDBTitle: cryo-em structure of an archaeal ribonuclease p
87	d2a6na1	Alignment	not modelled	26.1	9	Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: Class I aldolase
88	d1xxxa1	Alignment	not modelled	25.5	10	Fold: TIM beta/alpha-barrel Superfamily: Aldolase Family: Class I aldolase
89	c6arhA_	Alignment	not modelled	25.2	12	PDB header: lyase Chain: A: PDB Molecule: n-acetylneuraminatase lyase; PDBTitle: crystal structure of human nal at a resolution of 1.6 angstrom
90	c1bplA_	Alignment	not modelled	25.2	13	PDB header: glycosyltransferase Chain: A: PDB Molecule: alpha-1,4-glucan-4-glucanohydrolase; PDBTitle: glycosyltransferase
91	c2yb1A_	Alignment	not modelled	25.0	11	PDB header: hydrolase Chain: A: PDB Molecule: amidohydrolase; PDBTitle: structure of an amidohydrolase from <i>Chromobacterium violaceum</i> (efi2 target efi-500202) with bound mn, amp and phosphate.
92	c3h5dD_	Alignment	not modelled	24.7	11	PDB header: lyase Chain: D: PDB Molecule: dihydrodipicolinate synthase; PDBTitle: dihydrodipicolinate synthase from drug-resistant <i>Streptococcus pneumoniae</i>
93	c5ktIA_	Alignment	not modelled	23.9	13	PDB header: lyase Chain: A: PDB Molecule: 4-hydroxy-tetrahydrodipicolinate synthase; PDBTitle: dihydrodipicolinate synthase from the industrial and evolutionarily important cyanobacteria <i>Anabaena variabilis</i> .
94	c3noyA_	Alignment	not modelled	23.8	13	PDB header: oxidoreductase Chain: A: PDB Molecule: 4-hydroxy-3-methylbut-2-en-1-yl diphosphate synthase; PDBTitle: crystal structure of ispg (gcpe)
95	d1goxa_	Alignment	not modelled	23.2	9	Fold: TIM beta/alpha-barrel Superfamily: FMN-linked oxidoreductases Family: FMN-linked oxidoreductases
96	c3fkkA_	Alignment	not modelled	23.2	9	PDB header: lyase Chain: A: PDB Molecule: l-2-keto-3-deoxyarabonate dehydratase; PDBTitle: structure of l-2-keto-3-deoxyarabonate dehydratase
97	c3rpdB_	Alignment	not modelled	22.7	11	PDB header: transferase Chain: B: PDB Molecule: methionine synthase (b12-independent); PDBTitle: the structure of a b12-independent methionine synthase from <i>Shewanella</i> sp. w3-18-1 in complex with selenomethionine.
98	c4b5nA_	Alignment	not modelled	22.7	7	PDB header: oxidoreductase Chain: A: PDB Molecule: oxidoreductase, fmn-binding; PDBTitle: crystal structure of oxidized <i>Shewanella</i> yellow enzyme 4 (sy4)
99	c2hmcA_	Alignment	not modelled	21.8	12	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: dihydrodipicolinate synthase; PDBTitle: the crystal structure of dihydrodipicolinate synthase dapa from <i>Agrobacterium tumefaciens</i>
100	c4a3uB_	Alignment	not modelled	21.5	11	PDB header: oxidoreductase Chain: B: PDB Molecule: nadh:flavin oxidoreductase/nadh oxidase; PDBTitle: x-structure of the old yellow enzyme homologue from <i>Zymomonas mobilis</i> 2 (ncr)
101	d1mkza_	Alignment	not modelled	20.9	16	Fold: Molybdenum cofactor biosynthesis proteins Superfamily: Molybdenum cofactor biosynthesis proteins Family: MogA-like
102	c6mqhA_	Alignment	not modelled	20.6	11	PDB header: lyase Chain: A: PDB Molecule: 4-hydroxy-tetrahydrodipicolinate synthase; PDBTitle: crystal structure of 4-hydroxy-tetrahydrodipicolinate synthase (htpa2 synthase) from <i>Burkholderia mallei</i>
103	d2f6ua1	Alignment	not modelled	20.5	12	Fold: TIM beta/alpha-barrel Superfamily: FMN-linked oxidoreductases

				Family:FMN-linked oxidoreductases	
104	c4icnB_	Alignment	not modelled	20.3	11
				PDB header: lyase Chain: B: PDB Molecule: dihydrodipicolinate synthase; PDBTitle: dihydrodipicolinate synthase from shewanella benthica	