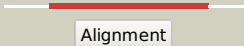

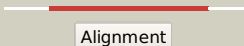

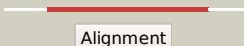







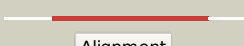










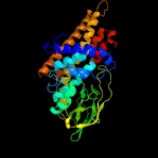
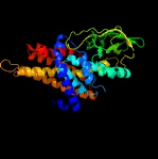

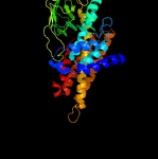


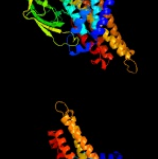
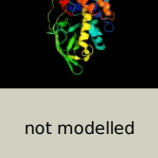


Phyre2

Email	mdejesus@rockefeller.edu
Description	RVBD3139_(fadE24)_3505360_3506766
Date	Thu Aug 8 16:20:32 BST 2019
Unique Job ID	dc9a59ffa81533ee

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c6es9A_	 Alignment		100.0	26	PDB header: flavoprotein Chain: A: PDB Molecule: acyl-coa dehydrogenase; PDBTitle: methylsuccinyl-coa dehydrogenase of paracoccus denitrificans with2 bound flavin adenine dinucleotide
2	c2z1qA_	 Alignment		100.0	31	PDB header: oxidoreductase Chain: A: PDB Molecule: acyl-coa dehydrogenase; PDBTitle: crystal structure of acyl coa dehydrogenase
3	c2ix5A_	 Alignment		100.0	27	PDB header: oxidoreductase Chain: A: PDB Molecule: acyl-coenzyme a oxidase 4, peroxisomal; PDBTitle: short chain specific acyl-coa oxidase from arabidopsis thaliana, acx42 in complex with acetoacetyl-coa
4	c3owaC_	 Alignment		100.0	27	PDB header: oxidoreductase Chain: C: PDB Molecule: acyl-coa dehydrogenase; PDBTitle: crystal structure of acyl-coa dehydrogenase complexed with fad from2 bacillus anthracis
5	c2a1tC_	 Alignment		100.0	30	PDB header: oxidoreductase/electron transport Chain: C: PDB Molecule: acyl-coa dehydrogenase, medium-chain specific, PDBTitle: structure of the human mcad:etf e165betaa complex
6	c1rx0B_	 Alignment		100.0	25	PDB header: oxidoreductase Chain: B: PDB Molecule: acyl-coa dehydrogenase family member 8, mitochondrial; PDBTitle: crystal structure of isobutyryl-coa dehydrogenase complexed with2 substrate/ligand.
7	c5zw2A_	 Alignment		100.0	25	PDB header: biosynthetic protein Chain: A: PDB Molecule: l-prolyl-[peptidyl-carrier protein] dehydrogenase; PDBTitle: fad complex of piga
8	c3swoA_	 Alignment		100.0	24	PDB header: oxidoreductase Chain: A: PDB Molecule: glutaryl-coa dehydrogenase; PDBTitle: crystal structure of a glutaryl-coa dehydrogenase from mycobacterium2 smegmatis in complex with fadh2
9	c1legcB_	 Alignment		100.0	29	PDB header: electron transfer Chain: B: PDB Molecule: medium chain acyl-coa dehydrogenase; PDBTitle: structure of t255e, e376g mutant of human medium chain acyl-2 coa dehydrogenase complexed with octanoyl-coa
10	c2uxwA_	 Alignment		100.0	25	PDB header: oxidoreductase Chain: A: PDB Molecule: very-long-chain specific acyl-coa dehydrogenase; PDBTitle: crystal structure of human very long chain acyl-coa dehydrogenase2 (acadvl)
11	c2pg0B_	 Alignment		100.0	24	PDB header: oxidoreductase Chain: B: PDB Molecule: acyl-coa dehydrogenase; PDBTitle: crystal structure of acyl-coa dehydrogenase from geobacillus2 kaustophilus

12	c3sf6A_	Alignment		100.0	23	PDB header: oxidoreductase Chain: A: PDB Molecule: glutaryl-coa dehydrogenase; PDBTitle: crystal structure of glutaryl-coa dehydrogenase from mycobacterium2 smegmatis
13	c1ivhD_	Alignment		100.0	26	PDB header: oxidoreductase Chain: D: PDB Molecule: isovaleryl-coa dehydrogenase; PDBTitle: structure of human isovaleryl-coa dehydrogenase at 2.62 angstroms resolution: structural basis for substrate3 specificity
14	c1siqA_	Alignment		100.0	25	PDB header: oxidoreductase Chain: A: PDB Molecule: glutaryl-coa dehydrogenase; PDBTitle: the crystal structure and mechanism of human glutaryl-coa2 dehydrogenase
15	c4n5fA_	Alignment		100.0	29	PDB header: oxidoreductase Chain: A: PDB Molecule: putative acyl-coa dehydrogenase; PDBTitle: crystal structure of a putative acyl-coa dehydrogenase with bound2 fadh2 from burkholderia cenocepacia j2315
16	c2cx9C_	Alignment		100.0	32	PDB header: oxidoreductase Chain: C: PDB Molecule: acyl-coa dehydrogenase; PDBTitle: crystal structure of acyl-coa dehydrogenase
17	c4irnF_	Alignment		100.0	26	PDB header: oxidoreductase Chain: F: PDB Molecule: prolyl-accp dehydrogenase; PDBTitle: crystal structure of the prolyl acyl carrier protein oxidase anab
18	c6ijcA_	Alignment		100.0	25	PDB header: oxidoreductase Chain: A: PDB Molecule: acyl-coa dehydrogenase family protein; PDBTitle: structure of mmpa-coa dehydrogenase from roseovarius nubinhibens ism
19	c1lukwA_	Alignment		100.0	31	PDB header: oxidoreductase Chain: A: PDB Molecule: acyl-coa dehydrogenase; PDBTitle: crystal structure of medium-chain acyl-coa dehydrogenase2 from thermus thermophilus hb8
20	c6cy8B_	Alignment		100.0	22	PDB header: biosynthetic protein Chain: B: PDB Molecule: butyryl-coa dehydrogenase; PDBTitle: crystal structure of fad-dependent dehydrogenase
21	c5ol2F_	Alignment	not modelled	100.0	29	PDB header: flavoprotein Chain: F: PDB Molecule: acyl-coa dehydrogenase; PDBTitle: the electron transferring flavoprotein/butyryl-coa dehydrogenase2 complex from clostridium difficile
22	c3oibB_	Alignment	not modelled	100.0	28	PDB header: oxidoreductase Chain: B: PDB Molecule: acyl-coa dehydrogenase; PDBTitle: crystal structure of a putative acyl-coa dehydrogenase from2 mycobacterium smegmatis, iodide soak
23	c3r7kB_	Alignment	not modelled	100.0	24	PDB header: oxidoreductase Chain: B: PDB Molecule: probable acyl coa dehydrogenase; PDBTitle: crystal structure of a probable acyl coa dehydrogenase from2 mycobacterium abscessus atcc 19977 / dsm 44196
24	c2vigC_	Alignment	not modelled	100.0	29	PDB header: oxidoreductase Chain: C: PDB Molecule: short-chain specific acyl-coa dehydrogenase,; PDBTitle: crystal structure of human short-chain acyl coa dehydrogenase
25	c411fB_	Alignment	not modelled	100.0	30	PDB header: electron transport Chain: B: PDB Molecule: acyl-coa dehydrogenase domain protein; PDBTitle: electron transferring flavoprotein of acidaminococcus fermentans:2 towards a mechanism of flavin-based electron bifurcation
26	c5ahsB_	Alignment	not modelled	100.0	25	PDB header: oxidoreductase Chain: B: PDB Molecule: acyl-coa dehydrogenase; PDBTitle: 3-sulfino-propionyl-coenzyme a (3sp-coa) desulfinate from advenella2 mimgardefordensis dpn7t: holo crystal structure with the substrate3 analog succinyl-coa
27	c2jifA_	Alignment	not modelled	100.0	28	PDB header: oxidoreductase Chain: A: PDB Molecule: short/branched chain specific acyl-coa dehydrogenase; PDBTitle: structure of human short-branched chain acyl-coa dehydrogenase2 (acadsb)

28	c3mkhC	Alignment	not modelled	100.0	21	PDB header: oxidoreductase Chain: C: PDB Molecule: nitroalkane oxidase; PDBTitle: podospora anserina nitroalkane oxidase
29	c3eomD	Alignment	not modelled	100.0	25	PDB header: oxidoreductase Chain: D: PDB Molecule: glutaryl-coa dehydrogenase; PDBTitle: 2.4 a crystal structure of native glutaryl-coa dehydrogenase from2 burkholderia pseudomallei
30	c3nf4B	Alignment	not modelled	100.0	27	PDB header: oxidoreductase Chain: B: PDB Molecule: acyl-coa dehydrogenase; PDBTitle: crystal structure of acyl-coa dehydrogenase from mycobacterium2 thermoresistibile bound to flavin adenine dinucleotide
31	c4iv6A	Alignment	not modelled	100.0	30	PDB header: oxidoreductase Chain: A: PDB Molecule: acyl-coa dehydrogenase fade3; PDBTitle: x-ray crystal structure of an isovaleryl-coa dehydrogenase from2 mycobacterium smegmatis
32	c2dvbB	Alignment	not modelled	100.0	32	PDB header: oxidoreductase Chain: B: PDB Molecule: acyl-coa dehydrogenase; PDBTitle: crystal structure of project tt0160 from thermus thermophilus hb8
33	c4u83A	Alignment	not modelled	100.0	30	PDB header: oxidoreductase Chain: A: PDB Molecule: acyl-coa dehydrogenase; PDBTitle: structure of brucella abortus butyryl-coa dehydrogenase
34	c4hr3A	Alignment	not modelled	100.0	20	PDB header: oxidoreductase Chain: A: PDB Molecule: putative acyl-coa dehydrogenase; PDBTitle: structure of a putative acyl-coa dehydrogenase from mycobacterium2 abscessus
35	c3mpjG	Alignment	not modelled	100.0	26	PDB header: oxidoreductase Chain: G: PDB Molecule: glutaryl-coa dehydrogenase; PDBTitle: structure of the glutaryl-coenzyme a dehydrogenase
36	c2rehD	Alignment	not modelled	100.0	20	PDB header: oxidoreductase Chain: D: PDB Molecule: nitroalkane oxidase; PDBTitle: mechanistic and structural analyses of the roles of arg4092 and asp402 in the reaction of the flavoprotein nitroalkane3 oxidase
37	c2ebaI	Alignment	not modelled	100.0	25	PDB header: oxidoreductase Chain: I: PDB Molecule: putative glutaryl-coa dehydrogenase; PDBTitle: crystal structure of the putative glutaryl-coa dehydrogenase from2 thermus thermophilus
38	c6fahD	Alignment	not modelled	100.0	30	PDB header: flavoprotein Chain: D: PDB Molecule: caffeyl-coa reductase-etf complex subunit carc; PDBTitle: molecular basis of the flavin-based electron-bifurcating caffeyl-coa2 reductase reaction
39	c4ktoB	Alignment	not modelled	100.0	24	PDB header: oxidoreductase Chain: B: PDB Molecule: isovaleryl-coa dehydrogenase; PDBTitle: crystal structure of a putative isovaleryl-coa dehydrogenase (psi-2 nysgrc-012251) from sinorhizobium meliloti 1021
40	c1bucB	Alignment	not modelled	100.0	29	PDB header: oxidoreductase Chain: B: PDB Molecule: butyryl-coa dehydrogenase; PDBTitle: three-dimensional structure of butyryl-coa dehydrogenase from2 megasphaera elsdonii
41	c5iduB	Alignment	not modelled	100.0	25	PDB header: oxidoreductase Chain: B: PDB Molecule: acyl-coa dehydrogenase domain protein; PDBTitle: crystal structure of an acyl-coa dehydrogenase domain protein from2 burkholderia phymatum bound to fad
42	c3pfdB	Alignment	not modelled	100.0	28	PDB header: oxidoreductase Chain: B: PDB Molecule: acyl-coa dehydrogenase; PDBTitle: crystal structure of an acyl-coa dehydrogenase from mycobacterium2 thermoresistibile bound to reduced flavin adenine dinucleotide solved3 by combined iodide ion sad mr
43	c4w9uD	Alignment	not modelled	100.0	24	PDB header: oxidoreductase Chain: D: PDB Molecule: acyl-coa dehydrogenase; PDBTitle: crystal structure of an acyl-coa dehydrogenase from brucella2 melitensis
44	c4rm7A	Alignment	not modelled	100.0	19	PDB header: oxidoreductase Chain: A: PDB Molecule: acyl-coa dehydrogenase; PDBTitle: the crystal structure of acyl-coa dehydrogenase from slackia2 heliotrinireducens dsm 20476
45	c1r2jA	Alignment	not modelled	100.0	23	PDB header: oxidoreductase Chain: A: PDB Molecule: protein fkbi; PDBTitle: fkbi for biosynthesis of methoxymalonyl extender unit of fk5202 polyketide immunosuppressant
46	c4x28B	Alignment	not modelled	100.0	21	PDB header: oxidoreductase Chain: B: PDB Molecule: acyl-coa dehydrogenase; PDBTitle: crystal structure of the chse4-chse5 complex from mycobacterium2 tuberculosis
47	c5ez3B	Alignment	not modelled	100.0	18	PDB header: oxidoreductase Chain: B: PDB Molecule: acyl-coa dehydrogenase; PDBTitle: crystal structure acyl-coa dehydrogenase from brucella melitensis in2 complex with fad
48	c2wbiB	Alignment	not modelled	100.0	20	PDB header: oxidoreductase Chain: B: PDB Molecule: acyl-coa dehydrogenase family member 11; PDBTitle: crystal structure of human acyl-coa dehydrogenase 11
49	c4doyE	Alignment	not modelled	100.0	20	PDB header: oxidoreductase Chain: E: PDB Molecule: dibenzothiophene desulfurization enzyme c; PDBTitle: crystal structure of dibenzothiophene desulfurization enzyme c
50	c5xdCB	Alignment	not modelled	100.0	18	PDB header: oxidoreductase Chain: B: PDB Molecule: thermophilic dibenzothiophene desulfurization enzyme c; PDBTitle: crystal structure of indole-bound tdsc from paenibacillus sp. a11-2
51	c5lnxC	Alignment	not modelled	100.0	29	PDB header: oxidoreductase Chain: C: PDB Molecule: acyl-coa dehydrogenase; PDBTitle: crystal structure of mmgc, an acyl-coa dehydrogenase from bacillus2 subtilis.
						PDB header: oxidoreductase

52	c4x28D_	Alignment	not modelled	100.0	24	Chain: D: PDB Molecule: acyl-coa dehydrogenase; PDBTitle: crystal structure of the chse4-chse5 complex from mycobacterium2 tuberculosis
53	c4m6zB_	Alignment	not modelled	100.0	19	PDB header: oxidoreductase Chain: B: PDB Molecule: acyl-[acyl-carrier-protein] dehydrogenase mbtn; PDBTitle: crystal structure of an acyl-acp dehydrogenase
54	c3m9vA_	Alignment	not modelled	100.0	19	PDB header: oxidoreductase Chain: A: PDB Molecule: fad-dependent oxidoreductase; PDBTitle: x-ray structure of a kijd3 in complex with dtdp
55	c5gj7A_	Alignment	not modelled	100.0	21	PDB header: oxidoreductase Chain: A: PDB Molecule: acyl-coa dehydrogenase type 2 domain protein; PDBTitle: putative acyl-coa dehydrogenase
56	c3djlA_	Alignment	not modelled	100.0	20	PDB header: oxidoreductase Chain: A: PDB Molecule: protein aidb; PDBTitle: crystal structure of alkylation response protein e. coli aidb
57	c4y9lB_	Alignment	not modelled	100.0	18	PDB header: oxidoreductase Chain: B: PDB Molecule: protein acdh-11, isoform b; PDBTitle: crystal structure of caenorhabditis elegans acdh-11
58	c2jbtA_	Alignment	not modelled	100.0	14	PDB header: oxidoreductase Chain: A: PDB Molecule: p-hydroxyphenylacetate hydroxylase c2\oxygenase PDBTitle: structure of the monooxygenase component of p-2 hydroxyphenylacetate hydroxylase from acinetobacter3 baumannii
59	c4zxbB_	Alignment	not modelled	100.0	22	PDB header: oxidoreductase Chain: B: PDB Molecule: dnmz; PDBTitle: streptomyces peucetius nitrososynthase dnmz in ligand-free state
60	c2or0B_	Alignment	not modelled	100.0	16	PDB header: oxidoreductase Chain: B: PDB Molecule: hydroxylase; PDBTitle: structural genomics, the crystal structure of a putative hydroxylase2 from rhodococcus sp. rha1
61	c5mr6R_	Alignment	not modelled	100.0	17	PDB header: oxidoreductase Chain: R: PDB Molecule: xiaf protein; PDBTitle: xiaf from streptomyces sp. in complex with fadh2 and glycerol
62	c2rfqA_	Alignment	not modelled	100.0	16	PDB header: oxidoreductase Chain: A: PDB Molecule: 3-hsa hydroxylase, oxygenase; PDBTitle: crystal structure of 3-hsa hydroxylase from rhodococcus sp. rha1
63	c2ddhA_	Alignment	not modelled	100.0	16	PDB header: oxidoreductase Chain: A: PDB Molecule: acyl-coa oxidase; PDBTitle: crystal structure of acyl-coa oxidase complexed with 3-oh-dodecanoate
64	c3mxlB_	Alignment	not modelled	100.0	18	PDB header: oxidoreductase Chain: B: PDB Molecule: nitrososynthase; PDBTitle: crystal structure of nitrososynthase from micromonospora carbonacea2 var. africana
65	c1w07A_	Alignment	not modelled	100.0	17	PDB header: oxidoreductase Chain: A: PDB Molecule: acyl-coa oxidase; PDBTitle: arabidopsis thaliana acyl-coa oxidase 1
66	c2fonA_	Alignment	not modelled	100.0	16	PDB header: oxidoreductase Chain: A: PDB Molecule: peroxisomal acyl-coa oxidase 1a; PDBTitle: x-ray crystal structure of leacx1, an acyl-coa oxidase from2 lycopersicon esculentum (tomato)
67	c5k3jA_	Alignment	not modelled	100.0	18	PDB header: oxidoreductase Chain: A: PDB Molecule: acyl-coenzyme a oxidase; PDBTitle: crystals structure of acyl-coa oxidase-2 in caenorhabditis elegans2 bound with fad, ascaroside-coa, and atp
68	c5y9dA_	Alignment	not modelled	100.0	21	PDB header: oxidoreductase Chain: A: PDB Molecule: acyl-coenzyme a oxidase 1; PDBTitle: crystal structure of acyl-coa oxidase1 from yarrowia lipolytica
69	c5k3iH_	Alignment	not modelled	100.0	16	PDB header: oxidoreductase Chain: H: PDB Molecule: acyl-coenzyme a oxidase; PDBTitle: crystal structure of acyl-coa oxidase-1 in caenorhabditis elegans2 complexed with fad and atp
70	c5ys9A_	Alignment	not modelled	100.0	20	PDB header: oxidoreductase Chain: A: PDB Molecule: acyl-coenzyme a oxidase 3; PDBTitle: crystal structure of acyl-coa oxidase3 from yarrowia lipolytica
71	d1rx0a2	Alignment	not modelled	100.0	24	Fold: Acyl-CoA dehydrogenase NM domain-like Superfamily: Acyl-CoA dehydrogenase NM domain-like Family: Medium chain acyl-CoA dehydrogenase, NM (N-terminal and middle) domains
72	d2c12a2	Alignment	not modelled	100.0	21	Fold: Acyl-CoA dehydrogenase NM domain-like Superfamily: Acyl-CoA dehydrogenase NM domain-like Family: Medium chain acyl-CoA dehydrogenase, NM (N-terminal and middle) domains
73	d2d29a2	Alignment	not modelled	100.0	27	Fold: Acyl-CoA dehydrogenase NM domain-like Superfamily: Acyl-CoA dehydrogenase NM domain-like Family: Medium chain acyl-CoA dehydrogenase, NM (N-terminal and middle) domains
74	d3mdea2	Alignment	not modelled	100.0	30	Fold: Acyl-CoA dehydrogenase NM domain-like Superfamily: Acyl-CoA dehydrogenase NM domain-like Family: Medium chain acyl-CoA dehydrogenase, NM (N-terminal and middle) domains
75	d1jqia2	Alignment	not modelled	100.0	23	Fold: Acyl-CoA dehydrogenase NM domain-like Superfamily: Acyl-CoA dehydrogenase NM domain-like Family: Medium chain acyl-CoA dehydrogenase, NM (N-terminal and middle) domains
76	d1egda2	Alignment	not modelled	100.0	28	Fold: Acyl-CoA dehydrogenase NM domain-like Superfamily: Acyl-CoA dehydrogenase NM domain-like Family: Medium chain acyl-CoA dehydrogenase, NM (N-terminal and middle) domains
77	d1ukwa2	Alignment	not modelled	100.0	28	Fold: Acyl-CoA dehydrogenase NM domain-like Superfamily: Acyl-CoA dehydrogenase NM domain-like Family: Medium chain acyl-CoA dehydrogenase, NM (N-terminal and middle) domains

78	d1buca2	Alignment	not modelled	100.0	27	Fold: Acyl-CoA dehydrogenase NM domain-like Superfamily: Acyl-CoA dehydrogenase NM domain-like Family: Medium chain acyl-CoA dehydrogenase, NM (N-terminal and middle) domains
79	d1r2ja2	Alignment	not modelled	100.0	24	Fold: Acyl-CoA dehydrogenase NM domain-like Superfamily: Acyl-CoA dehydrogenase NM domain-like Family: Medium chain acyl-CoA dehydrogenase, NM (N-terminal and middle) domains
80	d1sqa2	Alignment	not modelled	100.0	24	Fold: Acyl-CoA dehydrogenase NM domain-like Superfamily: Acyl-CoA dehydrogenase NM domain-like Family: Medium chain acyl-CoA dehydrogenase, NM (N-terminal and middle) domains
81	d1ivha2	Alignment	not modelled	100.0	24	Fold: Acyl-CoA dehydrogenase NM domain-like Superfamily: Acyl-CoA dehydrogenase NM domain-like Family: Medium chain acyl-CoA dehydrogenase, NM (N-terminal and middle) domains
82	c3hwcD	Alignment	not modelled	100.0	14	PDB header: oxidoreductase Chain: D: PDB Molecule: chlorophenol-4-monoxygenase component 2; PDBTitle: crystal structure of chlorophenol 4-monoxygenase (tftd) of2 burkholderia cepacia ac1100
83	d2ddha3	Alignment	not modelled	100.0	18	Fold: Acyl-CoA dehydrogenase NM domain-like Superfamily: Acyl-CoA dehydrogenase NM domain-like Family: acyl-CoA oxidase N-terminal domains
84	d1w07a3	Alignment	not modelled	100.0	19	Fold: Acyl-CoA dehydrogenase NM domain-like Superfamily: Acyl-CoA dehydrogenase NM domain-like Family: acyl-CoA oxidase N-terminal domains
85	c4g5eD	Alignment	not modelled	100.0	15	PDB header: oxidoreductase Chain: D: PDB Molecule: 2,4,6-trichlorophenol 4-monoxygenase; PDBTitle: 2,4,6-trichlorophenol 4-monoxygenase
86	c2vyjA	Alignment	not modelled	100.0	21	PDB header: oxidoreductase Chain: A: PDB Molecule: 4-hydroxyphenylacetate-3-hydroxylase; PDBTitle: crystal structure of the oxygenase component (hpab) of 4-2 hydroxyphenylacetate 3-monoxygenase complexed with fad and 4-3 hydroxyphenylacetate
87	clu8vA	Alignment	not modelled	100.0	15	PDB header: lyase, isomerase Chain: A: PDB Molecule: gamma-aminobutyrate metabolism dehydratase/isomerase; PDBTitle: crystal structure of 4-hydroxybutyryl-coa dehydratase from clostridium2 aminobutyricum: radical catalysis involving a [4fe-4s] cluster and3 flavin
88	d1sqa1	Alignment	not modelled	99.9	26	Fold: Bromodomain-like Superfamily: Acyl-CoA dehydrogenase C-terminal domain-like Family: Medium chain acyl-CoA dehydrogenase-like, C-terminal domain
89	d3mdea1	Alignment	not modelled	99.9	30	Fold: Bromodomain-like Superfamily: Acyl-CoA dehydrogenase C-terminal domain-like Family: Medium chain acyl-CoA dehydrogenase-like, C-terminal domain
90	d1ivha1	Alignment	not modelled	99.9	29	Fold: Bromodomain-like Superfamily: Acyl-CoA dehydrogenase C-terminal domain-like Family: Medium chain acyl-CoA dehydrogenase-like, C-terminal domain
91	c6eb0A	Alignment	not modelled	99.9	14	PDB header: oxidoreductase Chain: A: PDB Molecule: 4-hydroxyphenylacetate 3-monoxygenase, oxygenase subunit; PDBTitle: structure of 4-hydroxyphenylacetate 3-monoxygenase (hpab), oxygenase2 component from escherichia coli
92	d1legda1	Alignment	not modelled	99.9	31	Fold: Bromodomain-like Superfamily: Acyl-CoA dehydrogenase C-terminal domain-like Family: Medium chain acyl-CoA dehydrogenase-like, C-terminal domain
93	d1rx0a1	Alignment	not modelled	99.9	26	Fold: Bromodomain-like Superfamily: Acyl-CoA dehydrogenase C-terminal domain-like Family: Medium chain acyl-CoA dehydrogenase-like, C-terminal domain
94	d1jqia1	Alignment	not modelled	99.9	38	Fold: Bromodomain-like Superfamily: Acyl-CoA dehydrogenase C-terminal domain-like Family: Medium chain acyl-CoA dehydrogenase-like, C-terminal domain
95	d1ukwa1	Alignment	not modelled	99.9	35	Fold: Bromodomain-like Superfamily: Acyl-CoA dehydrogenase C-terminal domain-like Family: Medium chain acyl-CoA dehydrogenase-like, C-terminal domain
96	d2d29a1	Alignment	not modelled	99.9	41	Fold: Bromodomain-like Superfamily: Acyl-CoA dehydrogenase C-terminal domain-like Family: Medium chain acyl-CoA dehydrogenase-like, C-terminal domain
97	d2c12a1	Alignment	not modelled	99.9	21	Fold: Bromodomain-like Superfamily: Acyl-CoA dehydrogenase C-terminal domain-like Family: Medium chain acyl-CoA dehydrogenase-like, C-terminal domain
98	d1buca1	Alignment	not modelled	99.9	34	Fold: Bromodomain-like Superfamily: Acyl-CoA dehydrogenase C-terminal domain-like Family: Medium chain acyl-CoA dehydrogenase-like, C-terminal domain
99	d2ddha1	Alignment	not modelled	99.9	15	Fold: Bromodomain-like Superfamily: Acyl-CoA dehydrogenase C-terminal domain-like Family: acyl-CoA oxidase C-terminal domains
100	d1w07a1	Alignment	not modelled	99.9	15	Fold: Bromodomain-like Superfamily: Acyl-CoA dehydrogenase C-terminal domain-like Family: acyl-CoA oxidase C-terminal domains
101	d1r2ja1	Alignment	not modelled	99.9	25	Fold: Bromodomain-like Superfamily: Acyl-CoA dehydrogenase C-terminal domain-like Family: Medium chain acyl-CoA dehydrogenase-like, C-terminal domain
102	d1u8va2	Alignment	not modelled	99.8	19	Fold: Acyl-CoA dehydrogenase NM domain-like Superfamily: Acyl-CoA dehydrogenase NM domain-like Family: Medium chain acyl-CoA dehydrogenase, NM (N-terminal and

						middle) domains
103	c4oo2D_	Alignment	not modelled	99.3	14	PDB header: oxidoreductase Chain: D: PDB Molecule: chlorophenol-4-monoxygenase; PDBTitle: streptomyces globisporus c-1027 fad dependent (s)-3-chloro-β-2 tyrosine-s-sgcc2 c-5 hydroxylase sgcc apo form
104	d1u8va1	Alignment	not modelled	93.4	11	Fold: Bromodomain-like Superfamily: Acyl-CoA dehydrogenase C-terminal domain-like Family: Medium chain acyl-CoA dehydrogenase-like, C-terminal domain
105	d2p0ma1	Alignment	not modelled	38.4	12	Fold: Lipoxygenase Superfamily: Lipoxygenase Family: Animal lipoxygenases
106	c2p0mB_	Alignment	not modelled	38.1	14	PDB header: oxidoreductase Chain: B: PDB Molecule: arachidonate 15-lipoxygenase; PDBTitle: revised structure of rabbit reticulocyte 15s-lipoxygenase
107	c5fnoB_	Alignment	not modelled	34.2	11	PDB header: oxidoreductase Chain: B: PDB Molecule: manganese lipoxygenase; PDBTitle: manganese lipoxygenase
108	c2lv6B_	Alignment	not modelled	28.4	30	PDB header: metal binding protein/transferase Chain: B: PDB Molecule: myosin light chain kinase 2, skeletal/cardiac muscle; PDBTitle: the complex between ca-calmodulin and skeletal muscle myosin light2 chain kinase from combination of nmr and aqueous and contrast-matched3 saxs data
109	c2bbnB_	Alignment	not modelled	28.4	30	PDB header: calcium-binding protein Chain: B: PDB Molecule: myosin light chain kinase; PDBTitle: solution structure of a calmodulin-target peptide complex2 by multidimensional nmr
110	c2bbmB_	Alignment	not modelled	28.4	30	PDB header: calcium-binding protein Chain: B: PDB Molecule: myosin light chain kinase; PDBTitle: solution structure of a calmodulin-target peptide complex2 by multidimensional nmr
111	c1vfgB_	Alignment	not modelled	26.6	7	PDB header: transferase/rna Chain: B: PDB Molecule: poly a polymerase; PDBTitle: crystal structure of trna nucleotidyltransferase complexed2 with a primer trna and an incoming atp analog
112	c3vf1A_	Alignment	not modelled	26.5	13	PDB header: oxidoreductase Chain: A: PDB Molecule: 11r-lipoxygenase; PDBTitle: structure of a calcium-dependent 11r-lipoxygenase suggests a mechanism2 for ca-regulation
113	c5fx8A_	Alignment	not modelled	25.8	12	PDB header: oxidoreductase Chain: A: PDB Molecule: linoleate 11-lipoxygenase; PDBTitle: complete structure of manganese lipoxygenase of gaeumannomyces2 graminis and partial structure of zonadhesin of komagataella3 pastoris
114	d1vfga1	Alignment	not modelled	24.6	7	Fold: Poly A polymerase C-terminal region-like Superfamily: Poly A polymerase C-terminal region-like Family: Poly A polymerase C-terminal region-like
115	c2bjoA_	Alignment	not modelled	22.7	18	PDB header: oxidoreductase Chain: A: PDB Molecule: organic hydroperoxide resistance protein ohrb; PDBTitle: crystal structure of the organic hydroperoxide resistance2 protein ohrb of bacillus subtilis
116	c4g33A_	Alignment	not modelled	22.3	19	PDB header: oxidoreductase Chain: A: PDB Molecule: 15s-lipoxygenase; PDBTitle: crystal structure of a phospholipid-lipoxygenase complex from2 pseudomonas aeruginosa at 2.0 a (c2221)
117	c3aqnA_	Alignment	not modelled	20.6	9	PDB header: transferase Chain: A: PDB Molecule: poly(a) polymerase; PDBTitle: complex structure of bacterial protein (apo form ii)
118	c5okzj_	Alignment	not modelled	20.6	40	PDB header: rna binding protein Chain: J: PDB Molecule: m-phase phosphoprotein 6 homolog; PDBTitle: crystal structure of the mpp6 exosome complex