







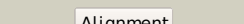

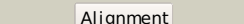

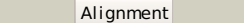

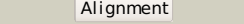

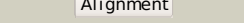

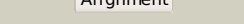

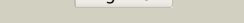






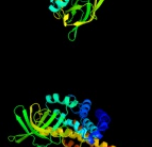


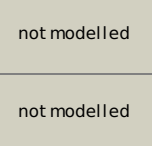


#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c2a1tC_	 Alignment		100.0	28	PDB header: oxidoreductase/electron transport Chain: C: PDB Molecule: acyl-coa dehydrogenase, medium-chain specific, PDBTitle: structure of the human mcad:etf e165betaa complex
2	clegcB_	 Alignment		100.0	28	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
3	c1rx0B_	 Alignment		100.0	25	PDB header: oxidoreductase Chain: B: PDB Molecule: acyl-coa dehydrogenase family member 8, PDBTitle: crystal structure of isobutyryl-coa dehydrogenase complexed2 with substrate/ligand.
4	c2z1qA_	 Alignment		100.0	28	PDB header: oxidoreductase Chain: A: PDB Molecule: acyl-coa dehydrogenase; PDBTitle: crystal structure of acyl coa dehydrogenase
5	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
6	c2ix5A_	 Alignment		100.0	22	PDB header: oxidoreductase Chain: A: PDB Molecule: acyl-coenzyme a oxidase 4, peroxisomal; PDBTitle: short chain specific acyl-coa oxidase from arabidopsis2 thaliana, acx4 in complex with acetoacetyl-coa
7	c2cx9C_	 Alignment		100.0	29	PDB header: oxidoreductase Chain: C: PDB Molecule: acyl-coa dehydrogenase; PDBTitle: crystal structure of acyl-coa dehydrogenase
8	c1ivhD_	 Alignment		100.0	28	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
9	c1ukwA_	 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
10	c2pg0B_	 Alignment		100.0	31	PDB header: oxidoreductase Chain: B: PDB Molecule: acyl-coa dehydrogenase; PDBTitle: crystal structure of acyl-coa dehydrogenase from geobacillus2 kaustophilus
11	c2jifA_	 Alignment		100.0	25	PDB header: oxidoreductase Chain: A: PDB Molecule: short/branched chain specific acyl-coa dehydrogenase; PDBTitle: structure of human short-branched chain acyl-coa2 dehydrogenase (acadsb)

12	c3swoA	Alignment		100.0	21	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
13	c2uxwA	Alignment		100.0	28	PDB header: oxidoreductase Chain: A: PDB Molecule: very-long-chain specific acyl-coa dehydrogenase; PDBTitle: crystal structure of human very long chain acyl-coa2 dehydrogenase (acadvl)
14	c2vigC	Alignment		100.0	30	PDB header: oxidoreductase Chain: C: PDB Molecule: short-chain specific acyl-coa dehydrogenase;; PDBTitle: crystal structure of human short-chain acyl coa2 dehydrogenase
15	c3sf6A	Alignment		100.0	22	PDB header: oxidoreductase Chain: A: PDB Molecule: glutaryl-coa dehydrogenase; PDBTitle: crystal structure of glutaryl-coa dehydrogenase from mycobacterium2 smegmatis
16	c3r7kB	Alignment		100.0	28	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
17	c1bucB	Alignment		100.0	31	PDB header: oxidoreductase Chain: B: PDB Molecule: butyryl-coa dehydrogenase; PDBTitle: three-dimensional structure of butyryl-coa dehydrogenase from2 megasphaera elsdenii
18	c1siqA	Alignment		100.0	23	PDB header: oxidoreductase Chain: A: PDB Molecule: glutaryl-coa dehydrogenase; PDBTitle: the crystal structure and mechanism of human glutaryl-coa2 dehydrogenase
19	c3mpiG	Alignment		100.0	27	PDB header: oxidoreductase Chain: G: PDB Molecule: glutaryl-coa dehydrogenase; PDBTitle: structure of the glutaryl-coenzyme a dehydrogenase
20	c3oibB	Alignment		100.0	29	PDB header: oxidoreductase Chain: B: PDB Molecule: acyl-coa dehydrogenase; PDBTitle: crystal structure of a putative acyl-coa dehydrogenase from2 mycobacterium smegmatis, iodide soak
21	c3eomD	Alignment	not modelled	100.0	22	PDB header: oxidoreductase Chain: D: PDB Molecule: glutaryl-coa dehydrogenase; PDBTitle: 2.4 a crystal structure of native glutaryl-coa dehydrogenase from2 burkholderia pseudomallei
22	c3mkhC	Alignment	not modelled	100.0	20	PDB header: oxidoreductase Chain: C: PDB Molecule: nitroalkane oxidase; PDBTitle: podospira anserina nitroalkane oxidase
23	c2dvlB	Alignment	not modelled	100.0	34	PDB header: oxidoreductase Chain: B: PDB Molecule: acyl-coa dehydrogenase; PDBTitle: crystal structure of project tt0160 from thermus thermophilus hb8
24	c2ebal	Alignment	not modelled	100.0	22	PDB header: oxidoreductase Chain: I: PDB Molecule: putative glutaryl-coa dehydrogenase; PDBTitle: crystal structure of the putative glutaryl-coa dehydrogenase from2 thermus thermophilus
25	c3nf4B	Alignment	not modelled	100.0	29	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
26	c3pfdB	Alignment	not modelled	100.0	31	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
27	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
						PDB header: oxidoreductase Chain: A: PDB Molecule: glutaryl-coa dehydrogenase; PDBTitle: crystal structure of glutaryl-coa dehydrogenase from mycobacterium2 smegmatis in complex with fadh2

28	c1r2jA_	Alignment	not modelled	100.0	19	Chain: A: PDB Molecule: protein tkbi; PDBTitle: fkbi for biosynthesis of methoxymalonyl extender unit of2 fk520 polyketide immunosuppresant
29	c2wbiB_	Alignment	not modelled	100.0	22	PDB header: oxidoreductase Chain: B: PDB Molecule: acyl-coa dehydrogenase family member 11; PDBTitle: crystal structure of human acyl-coa dehydrogenase 11
30	c3m9vA_	Alignment	not modelled	100.0	18	PDB header: oxidoreductase Chain: A: PDB Molecule: fad-dependent oxidoreductase; PDBTitle: x-ray structure of a kjd3 in complex with dtdp
31	c3dj1A_	Alignment	not modelled	100.0	22	PDB header: oxidoreductase Chain: A: PDB Molecule: protein aidb; PDBTitle: crystal structure of alkylation response protein e. coli aidb
32	c2or0B_	Alignment	not modelled	100.0	13	PDB header: oxidoreductase Chain: B: PDB Molecule: hydroxylase; PDBTitle: structural genomics, the crystal structure of a putative hydroxylase2 from rhodococcus sp. rha1
33	c2jbtA_	Alignment	not modelled	100.0	16	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
34	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
35	c2ddhA_	Alignment	not modelled	100.0	17	PDB header: oxidoreductase Chain: A: PDB Molecule: acyl-coa oxidase; PDBTitle: crystal structure of acyl-coa oxidase complexed with 3-oh-dodecanoate
36	c1w07A_	Alignment	not modelled	100.0	17	PDB header: oxidoreductase Chain: A: PDB Molecule: acyl-coa oxidase; PDBTitle: arabidopsis thaliana acyl-coa oxidase 1
37	c2fonA_	Alignment	not modelled	100.0	15	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)
38	c3mx1B_	Alignment	not modelled	100.0	19	PDB header: oxidoreductase Chain: B: PDB Molecule: nitrososynthase; PDBTitle: crystal structure of nitrososynthase from micromonospora carbonacea2 var. africana
39	d3mdea2	Alignment	not modelled	100.0	25	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
40	d2d29a2	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
41	d1rx0a2	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
42	d1legda2	Alignment	not modelled	100.0	25	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
43	d1ukwa2	Alignment	not modelled	100.0	25	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
44	d1jqia2	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
45	d2c12a2	Alignment	not modelled	100.0	16	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
46	d1buca2	Alignment	not modelled	100.0	26	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
47	d1ivha2	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
48	d1siqa2	Alignment	not modelled	100.0	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
49	d1r2ja2	Alignment	not modelled	100.0	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
50	c3hwcD_	Alignment	not modelled	100.0	13	PDB header: oxidoreductase Chain: D: PDB Molecule: chlorophenol-4-monooxygenase component 2; PDBTitle: crystal structure of chlorophenol 4-monooxygenase (tftd) of2 burkholderia cepacia ac1100
51	d2ddha3	Alignment	not modelled	100.0	17	Fold: Acyl-CoA dehydrogenase NM domain-like Superfamily: Acyl-CoA dehydrogenase NM domain-like Family: acyl-CoA oxidase N-terminal domains
52	d1w07a3	Alignment	not modelled	100.0	17	Fold: Acyl-CoA dehydrogenase NM domain-like Superfamily: Acyl-CoA dehydrogenase NM domain-like Family: acyl-CoA oxidase N-terminal domains
53	c2yyjA_	Alignment	not modelled	100.0	14	PDB header: oxidoreductase Chain: A: PDB Molecule: 4-hydroxyphenylacetate-3-hydroxylase; PDBTitle: crystal structure of the oxygenase component (hpb) of

						4-2 hydroxyphenylacetate 3-monooxygenase complexed with fad and 4-3 hydroxyphenylacetate
54	clu8vA	Alignment	not modelled	100.0	14	PDB header: lyase, isomerase Chain: A: PDB Molecule: gamma-aminobutyrate metabolism PDBTitle: crystal structure of 4-hydroxybutyryl-coa dehydratase from2 clostridium aminobutyricum: radical catalysis involving a3 [4fe-4s] cluster and flavin
55	d3mdea1	Alignment	not modelled	100.0	33	Fold: Bromodomain-like Superfamily: Acyl-CoA dehydrogenase C-terminal domain-like Family: Medium chain acyl-CoA dehydrogenase-like, C-terminal domain
56	d1egda1	Alignment	not modelled	100.0	34	Fold: Bromodomain-like Superfamily: Acyl-CoA dehydrogenase C-terminal domain-like Family: Medium chain acyl-CoA dehydrogenase-like, C-terminal domain
57	d1jqia1	Alignment	not modelled	100.0	35	Fold: Bromodomain-like Superfamily: Acyl-CoA dehydrogenase C-terminal domain-like Family: Medium chain acyl-CoA dehydrogenase-like, C-terminal domain
58	d1siqa1	Alignment	not modelled	100.0	27	Fold: Bromodomain-like Superfamily: Acyl-CoA dehydrogenase C-terminal domain-like Family: Medium chain acyl-CoA dehydrogenase-like, C-terminal domain
59	d1ivha1	Alignment	not modelled	100.0	34	Fold: Bromodomain-like Superfamily: Acyl-CoA dehydrogenase C-terminal domain-like Family: Medium chain acyl-CoA dehydrogenase-like, C-terminal domain
60	d1buca1	Alignment	not modelled	100.0	38	Fold: Bromodomain-like Superfamily: Acyl-CoA dehydrogenase C-terminal domain-like Family: Medium chain acyl-CoA dehydrogenase-like, C-terminal domain
61	d1rx0a1	Alignment	not modelled	100.0	29	Fold: Bromodomain-like Superfamily: Acyl-CoA dehydrogenase C-terminal domain-like Family: Medium chain acyl-CoA dehydrogenase-like, C-terminal domain
62	d2d29a1	Alignment	not modelled	100.0	38	Fold: Bromodomain-like Superfamily: Acyl-CoA dehydrogenase C-terminal domain-like Family: Medium chain acyl-CoA dehydrogenase-like, C-terminal domain
63	d1ukwa1	Alignment	not modelled	100.0	40	Fold: Bromodomain-like Superfamily: Acyl-CoA dehydrogenase C-terminal domain-like Family: Medium chain acyl-CoA dehydrogenase-like, C-terminal domain
64	d2c12a1	Alignment	not modelled	99.9	23	Fold: Bromodomain-like Superfamily: Acyl-CoA dehydrogenase C-terminal domain-like Family: Medium chain acyl-CoA dehydrogenase-like, C-terminal domain
65	d2ddha1	Alignment	not modelled	99.9	19	Fold: Bromodomain-like Superfamily: Acyl-CoA dehydrogenase C-terminal domain-like Family: acyl-CoA oxidase C-terminal domains
66	d1w07a1	Alignment	not modelled	99.9	16	Fold: Bromodomain-like Superfamily: Acyl-CoA dehydrogenase C-terminal domain-like Family: acyl-CoA oxidase C-terminal domains
67	d1r2ja1	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
68	d1u8va2	Alignment	not modelled	99.8	12	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
69	d1u8va1	Alignment	not modelled	94.6	19	Fold: Bromodomain-like Superfamily: Acyl-CoA dehydrogenase C-terminal domain-like Family: Medium chain acyl-CoA dehydrogenase-like, C-terminal domain
70	d1jhfa1	Alignment	not modelled	45.5	26	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: LexA repressor, N-terminal DNA-binding domain
71	c3aqaA	Alignment	not modelled	28.7	14	PDB header: transferase Chain: A: PDB Molecule: poly(a) polymerase; PDBTitle: complex structure of bacterial protein (apo form ii)
72	c3kxeD	Alignment	not modelled	25.1	13	PDB header: protein binding Chain: D: PDB Molecule: antitoxin protein pard-1; PDBTitle: a conserved mode of protein recognition and binding in a2 pard-pare toxin-antitoxin complex
73	c2kngA	Alignment	not modelled	16.0	26	PDB header: dna binding protein Chain: A: PDB Molecule: protein lsr2; PDBTitle: solution structure of c-domain of lsr2
74	c2pjpA	Alignment	not modelled	15.8	20	PDB header: translation/rna Chain: A: PDB Molecule: selenocysteine-specific elongation factor; PDBTitle: structure of the mrna-binding domain of elongation factor2 selb from e.coli in complex with secis rna
75	d1vfga1	Alignment	not modelled	11.4	12	Fold: Poly A polymerase C-terminal region-like Superfamily: Poly A polymerase C-terminal region-like Family: Poly A polymerase C-terminal region-like
76	c1oizA	Alignment	not modelled	11.2	20	PDB header: transport Chain: A: PDB Molecule: alpha-tocopherol transfer protein; PDBTitle: the molecular basis of vitamin e retention: structure of2 human alpha-tocopherol transfer protein
77	d1r5la2	Alignment	not modelled	9.3	19	Fold: Spollaa-like Superfamily: CRAL/TRIO domain Family: CRAL/TRIO domain
78	c2v79B	Alignment	not modelled	9.1	13	PDB header: dna-binding protein Chain: B: PDB Molecule: dna replication protein dnad; PDBTitle: crystal structure of the n-terminal domain of dnad from2 bacillus subtilis
						PDB header: structural genomics, unknown function

79	c1yx3A_	Alignment	not modelled	9.0	29	Chain: A: PDB Molecule: hypothetical protein dsrC; PDBTitle: nmr structure of allochromatium vinosum dsrC: northeast2 structural genomics consortium target op4
80	c3k2zA_	Alignment	not modelled	8.0	33	PDB header: hydrolase Chain: A: PDB Molecule: lexa repressor; PDBTitle: crystal structure of a lexa protein from thermotoga maritima
81	d1stza1	Alignment	not modelled	7.8	16	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Heat-inducible transcription repressor HrcA, N-terminal domain
82	c2a5wC_	Alignment	not modelled	7.7	23	PDB header: oxidoreductase Chain: C: PDB Molecule: sulfite reductase, desulfovibrin-type subunit gamma PDBTitle: crystal structure of the oxidized gamma-subunit of the dissimilatory2 sulfite reductase (dsrC) from archaeoglobus fulgidus
83	d1w96a2	Alignment	not modelled	7.7	18	Fold: PreATP-grasp domain Superfamily: PreATP-grasp domain Family: BC N-terminal domain-like
84	d1rr7a_	Alignment	not modelled	7.3	16	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Middle operon regulator, Mor
85	c1rr7A_	Alignment	not modelled	7.3	16	PDB header: transcription Chain: A: PDB Molecule: middle operon regulator; PDBTitle: crystal structure of the middle operon regulator protein of2 bacteriophage mu
86	d1ji8a_	Alignment	not modelled	7.2	21	Fold: DsrC, the gamma subunit of dissimilatory sulfite reductase Superfamily: DsrC, the gamma subunit of dissimilatory sulfite reductase Family: DsrC, the gamma subunit of dissimilatory sulfite reductase
87	d1kx9b_	Alignment	not modelled	6.9	26	Fold: alpha-alpha superhelix Superfamily: Chemosensory protein Csp2 Family: Chemosensory protein Csp2
88	d1jz8a5	Alignment	not modelled	6.8	29	Fold: TIM beta/alpha-barrel Superfamily: (Trans)glycosidases Family: beta-glycanases
89	d2v4ic1	Alignment	not modelled	6.2	9	Fold: DsrC, the gamma subunit of dissimilatory sulfite reductase Superfamily: DsrC, the gamma subunit of dissimilatory sulfite reductase Family: DsrC, the gamma subunit of dissimilatory sulfite reductase
90	c1k8gC_	Alignment	not modelled	5.9	13	PDB header: dna binding protein/dna Chain: C: PDB Molecule: telomere-binding protein alpha subunit; PDBTitle: crystal structure of the n-terminal domain of oxytricha2 nova telomere end binding protein alpha subunit both3 uncomplexed and complexed with telomeric ssdna
91	c2pheC_	Alignment	not modelled	5.8	14	PDB header: transcription Chain: C: PDB Molecule: alpha trans-inducing protein; PDBTitle: model for vp16 binding to pc4
92	c2phgB_	Alignment	not modelled	5.8	14	PDB header: transcription Chain: B: PDB Molecule: alpha trans-inducing protein; PDBTitle: model for vp16 binding to tfiib
93	c2rkjM_	Alignment	not modelled	5.7	12	PDB header: ligase/rna Chain: M: PDB Molecule: tyrosyl-trna synthetase; PDBTitle: cocrystal structure of a tyrosyl-trna synthetase splicing2 factor with a group i intron rna
94	c3c3jA_	Alignment	not modelled	5.6	27	PDB header: isomerase Chain: A: PDB Molecule: putative tagatose-6-phosphate ketose/aldose isomerase; PDBTitle: crystal structure of tagatose-6-phosphate ketose/aldose isomerase from2 escherichia coli
95	c3hy5A_	Alignment	not modelled	5.3	42	PDB header: transport protein Chain: A: PDB Molecule: retinaldehyde-binding protein 1; PDBTitle: crystal structure of cralbp