

# Phyre<sup>2</sup>

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Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d2cxa1	Alignment		100.0	96	<b>Fold:</b> Acyl-CoA N-acyltransferases (Nat) <b>Superfamily:</b> Acyl-CoA N-acyltransferases (Nat) <b>Family:</b> LFTR-like
2	c2cxaA	Alignment		100.0	96	<b>PDB header:</b> transferase <b>Chain:</b> A: <b>PDB Molecule:</b> leucyl/phenylalanyl-trna-protein transferase; <b>PDBTitle:</b> crystal structure of leucyl/phenylalanyl-trna protein2 transferase from escherichia coli
3	d1ne9a2	Alignment		97.1	12	<b>Fold:</b> Acyl-CoA N-acyltransferases (Nat) <b>Superfamily:</b> Acyl-CoA N-acyltransferases (Nat) <b>Family:</b> FemXAB nonribosomal peptidyltransferases
4	c1p4nA	Alignment		96.1	14	<b>PDB header:</b> ligase <b>Chain:</b> A: <b>PDB Molecule:</b> femx; <b>PDBTitle:</b> crystal structure of weissella viridescens femx:udp-murnac-2 pentapeptide complex
5	d1lrza3	Alignment		92.4	9	<b>Fold:</b> Acyl-CoA N-acyltransferases (Nat) <b>Superfamily:</b> Acyl-CoA N-acyltransferases (Nat) <b>Family:</b> FemXAB nonribosomal peptidyltransferases
6	c1lrzA	Alignment		51.0	12	<b>PDB header:</b> antibiotic inhibitor <b>Chain:</b> A: <b>PDB Molecule:</b> factor essential for expression of methicillin <b>PDBTitle:</b> x-ray crystal structure of staphylococcus aureus fema
7	c3thdD	Alignment		49.4	23	<b>PDB header:</b> hydrolase <b>Chain:</b> D: <b>PDB Molecule:</b> beta-galactosidase; <b>PDBTitle:</b> crystal structure of human beta-galactosidase in complex with 1-2 deoxygalactonojirimycin
8	c3iwgB	Alignment		46.8	13	<b>PDB header:</b> transferase <b>Chain:</b> B: <b>PDB Molecule:</b> acetyltransferase, gnat family; <b>PDBTitle:</b> acetyltransferase from gnat family from colwellia psychrerythraea.
9	c2ozhA	Alignment		45.1	13	<b>PDB header:</b> transferase <b>Chain:</b> A: <b>PDB Molecule:</b> hypothetical protein xcc2953; <b>PDBTitle:</b> crystal structure of a putative acetyltransferase belonging to the2 gnat family (xcc2953) from xanthomonas campestris pv. campestris at3 1.40 a resolution
10	c3s6fA	Alignment		41.6	12	<b>PDB header:</b> transferase <b>Chain:</b> A: <b>PDB Molecule:</b> hypothetical acetyltransferase; <b>PDBTitle:</b> crystal structure of a hypothetical acetyltransferase (dr_1678) from deinococcus radiodurans at 1.19 a resolution
11	c2kxeA	Alignment		33.5	25	<b>PDB header:</b> transferase <b>Chain:</b> A: <b>PDB Molecule:</b> dna polymerase ii small subunit; <b>PDBTitle:</b> n-terminal domain of the dp1 subunit of an archaeal d-family dna2 polymerase

12	<a href="#">c1qf6A</a>			31.5	24	<b>PDB header:</b> ligase/rna <b>Chain:</b> A: <b>PDB Molecule:</b> threonyl-tRNA synthetase; <b>PDBTitle:</b> structure of e. coli threonyl-tRNA synthetase complexed with its2 cognate tRNA
13	<a href="#">d1yvka1</a>			28.5	18	<b>Fold:</b> Acyl-CoA N-acyltransferases (Nat) <b>Superfamily:</b> Acyl-CoA N-acyltransferases (Nat) <b>Family:</b> N-acetyl transferase, NAT
14	<a href="#">d1cm0a</a>			22.0	14	<b>Fold:</b> Acyl-CoA N-acyltransferases (Nat) <b>Superfamily:</b> Acyl-CoA N-acyltransferases (Nat) <b>Family:</b> N-acetyl transferase, NAT
15	<a href="#">d1y7ral</a>			17.6	10	<b>Fold:</b> Acyl-CoA N-acyltransferases (Nat) <b>Superfamily:</b> Acyl-CoA N-acyltransferases (Nat) <b>Family:</b> N-acetyl transferase, NAT
16	<a href="#">d1s7ka1</a>			17.3	21	<b>Fold:</b> Acyl-CoA N-acyltransferases (Nat) <b>Superfamily:</b> Acyl-CoA N-acyltransferases (Nat) <b>Family:</b> N-acetyl transferase, NAT
17	<a href="#">d2hg2a1</a>			17.1	25	<b>Fold:</b> Heme iron utilization protein-like <b>Superfamily:</b> Heme iron utilization protein-like <b>Family:</b> HemS/ChuS-like
18	<a href="#">c2oixA</a>			16.3	31	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> xanthomonas outer protein d; <b>PDBTitle:</b> xanthomonas xopD c470a mutant
19	<a href="#">c1nyqA</a>			16.3	22	<b>PDB header:</b> ligase <b>Chain:</b> A: <b>PDB Molecule:</b> threonyl-tRNA synthetase 1; <b>PDBTitle:</b> structure of staphylococcus aureus threonyl-tRNA synthetase2 complexed with an analogue of threonyl adenylate
20	<a href="#">d2beia1</a>			16.1	15	<b>Fold:</b> Acyl-CoA N-acyltransferases (Nat) <b>Superfamily:</b> Acyl-CoA N-acyltransferases (Nat) <b>Family:</b> N-acetyl transferase, NAT
21	<a href="#">d1euva</a>		not modelled	15.2	12	<b>Fold:</b> Cysteine proteinases <b>Superfamily:</b> Cysteine proteinases <b>Family:</b> Adenain-like
22	<a href="#">d2j0pa1</a>		not modelled	15.0	25	<b>Fold:</b> Heme iron utilization protein-like <b>Superfamily:</b> Heme iron utilization protein-like <b>Family:</b> HemS/ChuS-like
23	<a href="#">d1pn0a3</a>		not modelled	14.4	10	<b>Fold:</b> FAD-linked reductases, C-terminal domain <b>Superfamily:</b> FAD-linked reductases, C-terminal domain <b>Family:</b> PHBH-like
24	<a href="#">c2g7bA</a>		not modelled	13.3	9	<b>PDB header:</b> transferase <b>Chain:</b> A: <b>PDB Molecule:</b> acetyltransferase, gnat family; <b>PDBTitle:</b> crystal structure of acetyltransferase (np_689019.1) from streptococcus agalactiae 2603 at 2.00 a resolution
25	<a href="#">c3i7tA</a>		not modelled	13.2	18	<b>PDB header:</b> unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> putative uncharacterized protein; <b>PDBTitle:</b> crystal structure of rv2704, a member of highly conserved2 yjgf/yer057c/uk114 family, from mycobacterium tuberculosis
26	<a href="#">c3d3aA</a>		not modelled	12.7	6	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> beta-galactosidase; <b>PDBTitle:</b> crystal structure of a beta-galactosidase from bacteroides2 thetaiotaomicron
27	<a href="#">c3i47A</a>		not modelled	12.3	27	<b>PDB header:</b> transport protein <b>Chain:</b> A: <b>PDB Molecule:</b> odorant binding protein (agap010409-pa); <b>PDBTitle:</b> crystal structure of the anopheles gambiae odorant-binding protein 22a
28	<a href="#">c3qr3B</a>		not modelled	11.2	9	<b>PDB header:</b> hydrolase <b>Chain:</b> B: <b>PDB Molecule:</b> endoglucanase eg-ii; <b>PDBTitle:</b> crystal structure of cel5a (eg2) from hypocrealejeiorina

						(trichoderma2 reesei)
29	<a href="#">c2zzjA</a>	Alignment	not modelled	10.7	25	<b>PDB header:</b> lyase <b>Chain:</b> A: <b>PDB Molecule:</b> glucuronan lyase a; <b>PDBTitle:</b> crystal structure of endo-beta-1,4-glucuronan lyase from2 fungus trichoderma reesei
30	<a href="#">c3eayA</a>	Alignment	not modelled	10.7	24	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> sentrin-specific protease 7; <b>PDBTitle:</b> crystal structure of the human senp7 catalytic domain
31	<a href="#">d2iy1a1</a>	Alignment	not modelled	10.7	12	<b>Fold:</b> Cysteine proteinases <b>Superfamily:</b> Cysteine proteinases <b>Family:</b> Adenain-like
32	<a href="#">d1wfxa</a>	Alignment	not modelled	10.5	15	<b>Fold:</b> ADP-ribosylation <b>Superfamily:</b> ADP-ribosylation <b>Family:</b> Tpt1/KptA
33	<a href="#">d1th0a</a>	Alignment	not modelled	10.2	24	<b>Fold:</b> Cysteine proteinases <b>Superfamily:</b> Cysteine proteinases <b>Family:</b> Adenain-like
34	<a href="#">d1jnd1</a>	Alignment	not modelled	9.7	7	<b>Fold:</b> TIM beta/alpha-barrel <b>Superfamily:</b> (Trans)glycosidases <b>Family:</b> Type II chitinase
35	<a href="#">c1pbta</a>	Alignment	not modelled	9.6	21	<b>PDB header:</b> hydrolase, oxidoreductase <b>Chain:</b> A: <b>PDB Molecule:</b> 6-phosphogluconolactonase; <b>PDBTitle:</b> the crystal structure of tm1154, oxidoreductase, sol/devb2 family from thermotoga maritima
36	<a href="#">c1vp7D</a>	Alignment	not modelled	9.6	38	<b>PDB header:</b> hydrolase <b>Chain:</b> D: <b>PDB Molecule:</b> exodeoxyribonuclease vii small subunit; <b>PDBTitle:</b> crystal structure of exodeoxyribonuclease vii small subunit2 (np_881400.1) from bordetella pertussis at 2.40 a resolution
37	<a href="#">c2r8rB</a>	Alignment	not modelled	9.0	32	<b>PDB header:</b> transferase <b>Chain:</b> B: <b>PDB Molecule:</b> sensor protein; <b>PDBTitle:</b> crystal structure of the n-terminal region (19..243) of sensor protein2 kdpd from pseudomonas syringae pv. tomato str. dc3000
38	<a href="#">d1fnna1</a>	Alignment	not modelled	8.9	16	<b>Fold:</b> DNA/RNA-binding 3-helical bundle <b>Superfamily:</b> "Winged helix" DNA-binding domain <b>Family:</b> Helicase DNA-binding domain
39	<a href="#">d2fr1a1</a>	Alignment	not modelled	8.5	10	<b>Fold:</b> NAD(P)-binding Rossmann-fold domains <b>Superfamily:</b> NAD(P)-binding Rossmann-fold domains <b>Family:</b> Tyrosine-dependent oxidoreductases
40	<a href="#">d1dqua</a>	Alignment	not modelled	8.1	22	<b>Fold:</b> TIM beta/alpha-barrel <b>Superfamily:</b> Phosphoenol pyruvate/pyruvate domain <b>Family:</b> Phosphoenol pyruvate mutase/Iscitrate lyase-like
41	<a href="#">c3ga9S</a>	Alignment	not modelled	8.1	31	<b>PDB header:</b> hydrolase <b>Chain:</b> S: <b>PDB Molecule:</b> capsule biosynthesis protein capd; <b>PDBTitle:</b> crystal structure of bacillus anthracis transpeptidase enzyme capd,2 crystal form ii
42	<a href="#">c3nnqA</a>	Alignment	not modelled	8.0	14	<b>PDB header:</b> viral protein <b>Chain:</b> A: <b>PDB Molecule:</b> n-terminal domain of moloney murine leukemia virus <b>PDBTitle:</b> crystal structure of the n-terminal domain of moloney murine leukemia2 virus integrase, northeast structural genomics consortium target or3
43	<a href="#">d1tdja2</a>	Alignment	not modelled	8.0	11	<b>Fold:</b> Ferrodoxin-like <b>Superfamily:</b> ACT-like <b>Family:</b> Allosteric threonine deaminase C-terminal domain
44	<a href="#">d1z4ra1</a>	Alignment	not modelled	8.0	15	<b>Fold:</b> Acyl-CoA N-acyltransferases (Nat) <b>Superfamily:</b> Acyl-CoA N-acyltransferases (Nat) <b>Family:</b> N-acetyl transferase, NAT
45	<a href="#">c1ur8B</a>	Alignment	not modelled	7.7	14	<b>PDB header:</b> hydrolase <b>Chain:</b> B: <b>PDB Molecule:</b> chitinase b; <b>PDBTitle:</b> interactions of a family 18 chitinase with the designed2 inhibitor hm508, and its degradation product,3 chitobiono-delta-lactone
46	<a href="#">c3qokA</a>	Alignment	not modelled	7.7	16	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> putative chitinase ii; <b>PDBTitle:</b> crystal structure of putative chitinase ii from klebsiella pneumoniae
47	<a href="#">c3g3sA</a>	Alignment	not modelled	7.5	15	<b>PDB header:</b> transferase <b>Chain:</b> A: <b>PDB Molecule:</b> gcn5-related n-acetyltransferase; <b>PDBTitle:</b> crystal structure of gcn5-related n-acetyltransferase-like protein2 (zp_00874857) (zp_00874857.1) from streptococcus suis 89/1591 at 1.803 a resolution
48	<a href="#">d1n71a</a>	Alignment	not modelled	7.3	16	<b>Fold:</b> Acyl-CoA N-acyltransferases (Nat) <b>Superfamily:</b> Acyl-CoA N-acyltransferases (Nat) <b>Family:</b> N-acetyl transferase, NAT
49	<a href="#">d2g4da1</a>	Alignment	not modelled	7.1	12	<b>Fold:</b> Cysteine proteinases <b>Superfamily:</b> Cysteine proteinases <b>Family:</b> Adenain-like
50	<a href="#">d1xpja</a>	Alignment	not modelled	7.1	28	<b>Fold:</b> HAD-like <b>Superfamily:</b> HAD-like <b>Family:</b> Hypothetical protein VC0232
51	<a href="#">d1q2ya</a>	Alignment	not modelled	7.0	12	<b>Fold:</b> Acyl-CoA N-acyltransferases (Nat) <b>Superfamily:</b> Acyl-CoA N-acyltransferases (Nat) <b>Family:</b> N-acetyl transferase, NAT
52	<a href="#">c2qw5B</a>	Alignment	not modelled	7.0	8	<b>PDB header:</b> isomerase <b>Chain:</b> B: <b>PDB Molecule:</b> xylose isomerase-like tim barrel; <b>PDBTitle:</b> crystal structure of a putative sugar phosphate isomerase/epimerase2 (ava4194) from anabaena variabilis atcc 29413 at 1.78 a resolution
53	<a href="#">d1vp7a</a>	Alignment	not modelled	6.8	41	<b>Fold:</b> Spectrin repeat-like <b>Superfamily:</b> XseB-like <b>Family:</b> XseB-like

54	<a href="#">c2uwqA</a>	Alignment	not modelled	6.8	31	<b>PDB header:</b> apoptosis <b>Chain:</b> A: <b>PDB Molecule:</b> apoptosis-stimulating of p53 protein 2; <b>PDBTitle:</b> solution structure of aspp2 n-terminus
55	<a href="#">d1vhxa</a>	Alignment	not modelled	6.8	12	<b>Fold:</b> Ribonuclease H-like motif <b>Superfamily:</b> Ribonuclease H-like <b>Family:</b> Putative Holliday junction resolvase RuvX
56	<a href="#">c1g5hA</a>	Alignment	not modelled	6.7	21	<b>PDB header:</b> dna binding protein <b>Chain:</b> A: <b>PDB Molecule:</b> mitochondrial dna polymerase accessory subunit; <b>PDBTitle:</b> crystal structure of the accessory subunit of murine mitochondrial2 polymerase gamma
57	<a href="#">d1u5la</a>	Alignment	not modelled	6.7	38	<b>Fold:</b> Prion-like <b>Superfamily:</b> Prion-like <b>Family:</b> Prion-like
58	<a href="#">d2atra1</a>	Alignment	not modelled	6.6	11	<b>Fold:</b> Acyl-CoA N-acyltransferases (Nat) <b>Superfamily:</b> Acyl-CoA N-acyltransferases (Nat) <b>Family:</b> N-acetyl transferase, NAT
59	<a href="#">d2bkra1</a>	Alignment	not modelled	6.6	6	<b>Fold:</b> Cysteine proteinases <b>Superfamily:</b> Cysteine proteinases <b>Family:</b> Adenain-like
60	<a href="#">d1qf6a1</a>	Alignment	not modelled	6.6	14	<b>Fold:</b> Anticodon-binding domain-like <b>Superfamily:</b> Class II aaRS ABD-related <b>Family:</b> Anticodon-binding domain of Class II aaRS
61	<a href="#">d1vp7b</a>	Alignment	not modelled	6.6	41	<b>Fold:</b> Spectrin repeat-like <b>Superfamily:</b> XseB-like <b>Family:</b> XseB-like
62	<a href="#">c3duzA</a>	Alignment	not modelled	6.5	19	<b>PDB header:</b> viral protein <b>Chain:</b> A: <b>PDB Molecule:</b> major envelope glycoprotein; <b>PDBTitle:</b> crystal structure of the postfusion form of baculovirus2 fusion protein gp64
63	<a href="#">d1y9wa1</a>	Alignment	not modelled	6.4	13	<b>Fold:</b> Acyl-CoA N-acyltransferases (Nat) <b>Superfamily:</b> Acyl-CoA N-acyltransferases (Nat) <b>Family:</b> N-acetyl transferase, NAT
64	<a href="#">c2dsKA</a>	Alignment	not modelled	6.3	15	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> chitinase; <b>PDBTitle:</b> crystal structure of catalytic domain of hyperthermophilic chitinase2 from pyrococcus furiosus
65	<a href="#">d1vpqA</a>	Alignment	not modelled	6.3	24	<b>Fold:</b> TIM beta/alpha-barrel <b>Superfamily:</b> TM1631-like <b>Family:</b> TM1631-like
66	<a href="#">c1rk8C</a>	Alignment	not modelled	6.1	56	<b>PDB header:</b> translation <b>Chain:</b> C: <b>PDB Molecule:</b> within the bgcn gene intron protein; <b>PDBTitle:</b> structure of the cytosolic protein pym bound to the mago-2 y14 core of the exon junction complex
67	<a href="#">d1rk8c</a>	Alignment	not modelled	6.1	56	<b>Fold:</b> WW domain-like <b>Superfamily:</b> Pym (Within the bgcn gene intron protein, WIBG), N-terminal domain <b>Family:</b> Pym (Within the bgcn gene intron protein, WIBG), N-terminal domain
68	<a href="#">c1yb2A</a>	Alignment	not modelled	6.1	14	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> hypothetical protein ta0852; <b>PDBTitle:</b> structure of a putative methyltransferase from thermoplasma2 acidophilum.
69	<a href="#">d1yb2a1</a>	Alignment	not modelled	6.1	14	<b>Fold:</b> S-adenosyl-L-methionine-dependent methyltransferases <b>Superfamily:</b> S-adenosyl-L-methionine-dependent methyltransferases <b>Family:</b> tRNA(1-methyladenosine) methyltransferase-like
70	<a href="#">c2huzB</a>	Alignment	not modelled	6.1	11	<b>PDB header:</b> structural genomics, transferase <b>Chain:</b> B: <b>PDB Molecule:</b> glucosamine 6-phosphate n-acetyltransferase; <b>PDBTitle:</b> crystal structure of gnpnat1
71	<a href="#">c3dd7A</a>	Alignment	not modelled	6.0	24	<b>PDB header:</b> ribosome inhibitor <b>Chain:</b> A: <b>PDB Molecule:</b> death on curing protein; <b>PDBTitle:</b> structure of doch66y in complex with the c-terminal domain of phd
72	<a href="#">d2hd9a1</a>	Alignment	not modelled	5.8	23	<b>Fold:</b> PUA domain-like <b>Superfamily:</b> PUA domain-like <b>Family:</b> Atu2648/PH1033-like
73	<a href="#">c3kruC</a>	Alignment	not modelled	5.8	14	<b>PDB header:</b> oxidoreductase <b>Chain:</b> C: <b>PDB Molecule:</b> nadh:flavin oxidoreductase/nadh oxidase; <b>PDBTitle:</b> crystal structure of the thermostable old yellow enzyme from2 thermomaerobacter pseudethanolicus e39
74	<a href="#">d1jeyb1</a>	Alignment	not modelled	5.7	18	<b>Fold:</b> SPOC domain-like <b>Superfamily:</b> SPOC domain-like <b>Family:</b> Ku80 subunit middle domain
75	<a href="#">c3grcD</a>	Alignment	not modelled	5.7	17	<b>PDB header:</b> transferase <b>Chain:</b> D: <b>PDB Molecule:</b> sensor protein, kinase; <b>PDBTitle:</b> crystal structure of a sensor protein from polaromonas sp.2 js666
76	<a href="#">d1h4pa</a>	Alignment	not modelled	5.5	19	<b>Fold:</b> TIM beta/alpha-barrel <b>Superfamily:</b> (Trans)glycosidases <b>Family:</b> beta-glycanases
77	<a href="#">c2l6pA</a>	Alignment	not modelled	5.2	26	<b>PDB header:</b> structure genomics, unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> phac1, phac2 and phad genes; <b>PDBTitle:</b> nmr solution structure of the protein np_253742.1