

# Phyre<sup>2</sup>

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Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d3euga_	Alignment		100.0	99	<b>Fold:</b> Uracil-DNA glycosylase-like <b>Superfamily:</b> Uracil-DNA glycosylase-like <b>Family:</b> Uracil-DNA glycosylase
2	c3tr7A_	Alignment		100.0	62	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> uracil-dna glycosylase; <b>PDBTitle:</b> structure of a uracil-dna glycosylase (ung) from coxiella burnetii
3	d1okba_	Alignment		100.0	59	<b>Fold:</b> Uracil-DNA glycosylase-like <b>Superfamily:</b> Uracil-DNA glycosylase-like <b>Family:</b> Uracil-DNA glycosylase
4	d2hxma1	Alignment		100.0	56	<b>Fold:</b> Uracil-DNA glycosylase-like <b>Superfamily:</b> Uracil-DNA glycosylase-like <b>Family:</b> Uracil-DNA glycosylase
5	c2booA_	Alignment		100.0	55	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> uracil-dna glycosylase; <b>PDBTitle:</b> the crystal structure of uracil-dna n-glycosylase (ung)2 from deinococcus radiodurans.
6	c3cxmA_	Alignment		100.0	48	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> uracil-dna glycosylase; <b>PDBTitle:</b> leishmania naiffi uracil-dna glycosylase in complex with 5-bromouracil
7	d1laue_	Alignment		100.0	46	<b>Fold:</b> Uracil-DNA glycosylase-like <b>Superfamily:</b> Uracil-DNA glycosylase-like <b>Family:</b> Uracil-DNA glycosylase
8	c2zhxG_	Alignment		100.0	38	<b>PDB header:</b> hydrolase/hydrolase inhibitor <b>Chain:</b> G: <b>PDB Molecule:</b> uracil-dna glycosylase; <b>PDBTitle:</b> crystal structure of uracil-dna glycosylase from mycobacterium2 tuberculosis in complex with a proteinaceous inhibitor
9	d2j8xa1	Alignment		100.0	48	<b>Fold:</b> Uracil-DNA glycosylase-like <b>Superfamily:</b> Uracil-DNA glycosylase-like <b>Family:</b> Uracil-DNA glycosylase
10	c2owrD_	Alignment		100.0	20	<b>PDB header:</b> hydrolase <b>Chain:</b> D: <b>PDB Molecule:</b> uracil-dna glycosylase; <b>PDBTitle:</b> crystal structure of vaccinia virus uracil-dna glycosylase
11	c2rbaB_	Alignment		97.0	10	<b>PDB header:</b> hydrolase/dna <b>Chain:</b> B: <b>PDB Molecule:</b> g/t mismatch-specific thymine dna glycosylase; <b>PDBTitle:</b> structure of human thymine dna glycosylase bound to abasic and2 undamaged dna

12	<a href="#">c2c2pA_</a>			95.0	13	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> g/u mismatch-specific dna glycosylase; <b>PDBTitle:</b> the crystal structure of mismatch specific uracil-dna2 glycosylase (mug) from deinococcus radiodurans
13	<a href="#">d1oe4a_</a>			94.7	17	<b>Fold:</b> Uracil-DNA glycosylase-like <b>Superfamily:</b> Uracil-DNA glycosylase-like <b>Family:</b> Single-strand selective monofunctional uracil-DNA glycosylase SMUG1
14	<a href="#">d1muga_</a>			94.7	13	<b>Fold:</b> Uracil-DNA glycosylase-like <b>Superfamily:</b> Uracil-DNA glycosylase-like <b>Family:</b> Mug-like
15	<a href="#">d1ui0a_</a>			94.3	18	<b>Fold:</b> Uracil-DNA glycosylase-like <b>Superfamily:</b> Uracil-DNA glycosylase-like <b>Family:</b> Mug-like
16	<a href="#">c3ikbB_</a>			93.6	23	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> B: <b>PDB Molecule:</b> uncharacterized conserved protein; <b>PDBTitle:</b> the structure of a conserved protein from streptococcus2 mutans ua159.
17	<a href="#">c2d3yA_</a>			92.4	16	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> uracil-dna glycosylase; <b>PDBTitle:</b> crystal structure of uracil-dna glycosylase from thermus thermophilus2 hb8
18	<a href="#">d1vk2a_</a>			90.4	20	<b>Fold:</b> Uracil-DNA glycosylase-like <b>Superfamily:</b> Uracil-DNA glycosylase-like <b>Family:</b> Mug-like
19	<a href="#">c2h2wA_</a>			50.6	18	<b>PDB header:</b> transferase <b>Chain:</b> A: <b>PDB Molecule:</b> homoserine o-succinyltransferase; <b>PDBTitle:</b> crystal structure of homoserine o-succinyltransferase (ec 2.3.1.46)2 (homoserine o-transsuccinylase) (hts) (tm0881) from thermotoga3 maritima at 2.52 a resolution
20	<a href="#">c3p9xB_</a>			35.1	18	<b>PDB header:</b> transferase <b>Chain:</b> B: <b>PDB Molecule:</b> phosphoribosylglycinamide formyltransferase; <b>PDBTitle:</b> crystal structure of phosphoribosylglycinamide formyltransferase from2 bacillus halodurans
21	<a href="#">d1meoa_</a>		not modelled	32.3	20	<b>Fold:</b> Formyltransferase <b>Superfamily:</b> Formyltransferase <b>Family:</b> Formyltransferase
22	<a href="#">c2l3fA_</a>		not modelled	30.2	9	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> uncharacterized protein; <b>PDBTitle:</b> solution nmr structure of a putative uracil dna glycosylase from2 methanosaerica acetylavorans, northeast structural genomics consortium3 target mvr76
23	<a href="#">c2ywra_</a>		not modelled	30.0	17	<b>PDB header:</b> transferase <b>Chain:</b> A: <b>PDB Molecule:</b> phosphoribosylglycinamide formyltransferase; <b>PDBTitle:</b> crystal structure of gar transformylase from aquifex2 aeolicus
24	<a href="#">c3tqrA_</a>		not modelled	25.7	17	<b>PDB header:</b> transferase <b>Chain:</b> A: <b>PDB Molecule:</b> phosphoribosylglycinamide formyltransferase; <b>PDBTitle:</b> structure of the phosphoribosylglycinamide formyltransferase (purn) in2 complex with ches from coxiella burnetii
25	<a href="#">d1jkxa_</a>		not modelled	22.1	25	<b>Fold:</b> Formyltransferase <b>Superfamily:</b> Formyltransferase <b>Family:</b> Formyltransferase
26	<a href="#">c3dcjA_</a>		not modelled	19.5	15	<b>PDB header:</b> transferase <b>Chain:</b> A: <b>PDB Molecule:</b> probable 5'-phosphoribosylglycinamide <b>PDBTitle:</b> crystal structure of glycinamide formyltransferase (purn)2 from mycobacterium tuberculosis in complex with 5-methyl-5,3,6,7,8-tetrahydrofolic acid derivative
27	<a href="#">c3t7hb_</a>		not modelled	15.6	20	<b>PDB header:</b> ligase <b>Chain:</b> B: <b>PDB Molecule:</b> ubiquitin-like modifier-activating enzyme atg7; <b>PDBTitle:</b> atg8 transfer from atg7 to atg3: a distinctive e1-e2

						architecture and2 mechanism in the autophagy pathway
28	<a href="#">c1fmtA_</a>	Alignment	not modelled	15.1	21	<b>PDB header:</b> formyltransferase <b>Chain:</b> A: <b>PDB Molecule:</b> methionyl-tRNA fmet formyltransferase; <b>PDBTitle:</b> methionyl-tRNAfmet formyltransferase from escherichia coli
29	<a href="#">d2ghra1</a>	Alignment	not modelled	14.4	11	<b>Fold:</b> Flavodoxin-like <b>Superfamily:</b> Class I glutamine amidotransferase-like <b>Family:</b> HTS-like
30	<a href="#">c3nrbd_</a>	Alignment	not modelled	13.4	11	<b>PDB header:</b> hydrolase <b>Chain:</b> D: <b>PDB Molecule:</b> formyltetrahydrofolate deformylase; <b>PDBTitle:</b> crystal structure of a formyltetrahydrofolate deformylase (puru,2 pp_1943) from pseudomonas putida kt2440 at 2.05 a resolution
31	<a href="#">d2blna2</a>	Alignment	not modelled	12.8	21	<b>Fold:</b> Formyltransferase <b>Superfamily:</b> Formyltransferase <b>Family:</b> Formyltransferase
32	<a href="#">d1fmata2</a>	Alignment	not modelled	12.3	18	<b>Fold:</b> Formyltransferase <b>Superfamily:</b> Formyltransferase <b>Family:</b> Formyltransferase
33	<a href="#">c2yqsa_</a>	Alignment	not modelled	12.0	17	<b>PDB header:</b> transferase <b>Chain:</b> A: <b>PDB Molecule:</b> UDP-N-acetylglucosamine pyrophosphorylase; <b>PDBTitle:</b> crystal structure of uridine-diphospho-N-acetylglucosamine2 pyrophosphorylase from candida albicans, in the product-binding form
34	<a href="#">c3o1IB_</a>	Alignment	not modelled	11.8	25	<b>PDB header:</b> hydrolase <b>Chain:</b> B: <b>PDB Molecule:</b> formyltetrahydrofolate deformylase; <b>PDBTitle:</b> crystal structure of a formyltetrahydrofolate deformylase (pspto_4314)2 from pseudomonas syringae pv. tomato str. dc3000 at 2.20 a resolution
35	<a href="#">d1maba2</a>	Alignment	not modelled	11.7	29	<b>Fold:</b> Domain of alpha and beta subunits of F1 ATP synthase-like <b>Superfamily:</b> N-terminal domain of alpha and beta subunits of F1 ATP synthase <b>Family:</b> N-terminal domain of alpha and beta subunits of F1 ATP synthase
36	<a href="#">d2bw0a2</a>	Alignment	not modelled	10.7	27	<b>Fold:</b> Formyltransferase <b>Superfamily:</b> Formyltransferase <b>Family:</b> Formyltransferase
37	<a href="#">c3n0vD_</a>	Alignment	not modelled	10.5	17	<b>PDB header:</b> hydrolase <b>Chain:</b> D: <b>PDB Molecule:</b> formyltetrahydrofolate deformylase; <b>PDBTitle:</b> crystal structure of a formyltetrahydrofolate deformylase (pp_0327)2 from pseudomonas putida kt2440 at 2.25 a resolution
38	<a href="#">c3oc9A_</a>	Alignment	not modelled	10.4	14	<b>PDB header:</b> transferase <b>Chain:</b> A: <b>PDB Molecule:</b> UDP-N-acetylglucosamine pyrophosphorylase; <b>PDBTitle:</b> crystal structure of putative UDP-N-acetylglucosamine2 pyrophosphorylase from entamoeba histolytica
39	<a href="#">c2p2gD_</a>	Alignment	not modelled	10.4	12	<b>PDB header:</b> transferase <b>Chain:</b> D: <b>PDB Molecule:</b> ornithine carbamoyltransferase; <b>PDBTitle:</b> crystal structure of ornithine carbamoyltransferase from mycobacterium tuberculosis (rv1656): orthorhombic form
40	<a href="#">d1skyb2</a>	Alignment	not modelled	9.8	33	<b>Fold:</b> Domain of alpha and beta subunits of F1 ATP synthase-like <b>Superfamily:</b> N-terminal domain of alpha and beta subunits of F1 ATP synthase <b>Family:</b> N-terminal domain of alpha and beta subunits of F1 ATP synthase
41	<a href="#">c3ogzA_</a>	Alignment	not modelled	9.6	13	<b>PDB header:</b> transferase <b>Chain:</b> A: <b>PDB Molecule:</b> UDP-sugar pyrophosphorylase; <b>PDBTitle:</b> protein structure of usp from l. major in apo-form
42	<a href="#">c3obiC_</a>	Alignment	not modelled	9.4	15	<b>PDB header:</b> hydrolase <b>Chain:</b> C: <b>PDB Molecule:</b> formyltetrahydrofolate deformylase; <b>PDBTitle:</b> crystal structure of a formyltetrahydrofolate deformylase (np_949368)2 from rhodopseudomonas palustris cga009 at 1.95 a resolution
43	<a href="#">d1fx0a2</a>	Alignment	not modelled	9.4	29	<b>Fold:</b> Domain of alpha and beta subunits of F1 ATP synthase-like <b>Superfamily:</b> N-terminal domain of alpha and beta subunits of F1 ATP synthase <b>Family:</b> N-terminal domain of alpha and beta subunits of F1 ATP synthase
44	<a href="#">c1yrwA_</a>	Alignment	not modelled	9.3	21	<b>PDB header:</b> transferase <b>Chain:</b> A: <b>PDB Molecule:</b> protein arna; <b>PDBTitle:</b> crystal structure of e.coli arna transformylase domain
45	<a href="#">c2xrfA_</a>	Alignment	not modelled	8.9	54	<b>PDB header:</b> transferase <b>Chain:</b> A: <b>PDB Molecule:</b> uridine phosphorylase 2; <b>PDBTitle:</b> crystal structure of human uridine phosphorylase 2
46	<a href="#">c3e35A_</a>	Alignment	not modelled	8.5	18	<b>PDB header:</b> unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> uncharacterized protein sco1997; <b>PDBTitle:</b> actinobacteria-specific protein of unknown function, sco1997
47	<a href="#">d1pj3a1</a>	Alignment	not modelled	8.5	21	<b>Fold:</b> NAD(P)-binding Rossmann-fold domains <b>Superfamily:</b> NAD(P)-binding Rossmann-fold domains <b>Family:</b> Aminoacid dehydrogenase-like, C-terminal domain
48	<a href="#">d2jdia2</a>	Alignment	not modelled	8.3	29	<b>Fold:</b> Domain of alpha and beta subunits of F1 ATP synthase-like <b>Superfamily:</b> N-terminal domain of alpha and beta subunits of F1 ATP synthase <b>Family:</b> N-terminal domain of alpha and beta subunits of F1 ATP synthase
49	<a href="#">d1q3qa2</a>	Alignment	not modelled	8.1	26	<b>Fold:</b> The "swivelling" beta/beta/alpha domain <b>Superfamily:</b> GroEL apical domain-like <b>Family:</b> Group II chaperonin (CCT, TRIC), apical domain
50	<a href="#">c3kcqA_</a>	Alignment	not modelled	8.1	20	<b>PDB header:</b> transferase <b>Chain:</b> A: <b>PDB Molecule:</b> phosphoribosylglycinamide formyltransferase; <b>PDBTitle:</b> crystal structure of phosphoribosylglycinamide formyltransferase from anaplasma phagocytophilum
						<b>Fold:</b> ATC-like

51	<a href="#">d1ekxa2</a>		not modelled	7.9	26	<b>Superfamily:</b> Aspartate/ornithine carbamoyl transferase <b>Family:</b> Aspartate/ornithine carbamoyl transferase
52	<a href="#">d2j13a1</a>		not modelled	7.8	9	<b>Fold:</b> 7-stranded beta/alpha barrel <b>Superfamily:</b> Glycoside hydrolase/deacetylase <b>Family:</b> NodB-like polysaccharide deacetylase
53	<a href="#">c1z7eC_</a>		not modelled	7.6	21	<b>PDB header:</b> hydrolase <b>Chain:</b> C: <b>PDB Molecule:</b> protein arna; <b>PDBTitle:</b> crystal structure of full length arna
54	<a href="#">c2k3mA_</a>		not modelled	7.2	70	<b>PDB header:</b> membrane protein <b>Chain:</b> A: <b>PDB Molecule:</b> rv1761c; <b>PDBTitle:</b> rv1761c
55	<a href="#">c2iw0A_</a>		not modelled	7.2	12	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> chitin deacetylase; <b>PDBTitle:</b> structure of the chitin deacetylase from the fungal2 pathogen <i>colletotrichum lindemuthianum</i> <b>Fold:</b> Dimerization-anchoring domain of cAMP-dependent PK regulatory subunit
56	<a href="#">d1r2aa_</a>		not modelled	7.0	25	<b>Superfamily:</b> Dimerization-anchoring domain of cAMP-dependent PK regulatory subunit <b>Family:</b> Dimerization-anchoring domain of cAMP-dependent PK regulatory subunit <b>PDB header:</b> transferase <b>Chain:</b> C: <b>PDB Molecule:</b> uridine phosphorylase 1; <b>PDBTitle:</b> crystal structure of bau-bound human uridine phosphorylase 1
57	<a href="#">c3eufC_</a>		not modelled	6.7	54	<b>Fold:</b> Nucleotide-diphospho-sugar transferases <b>Superfamily:</b> Nucleotide-diphospho-sugar transferases <b>Family:</b> UDP-glucose pyrophosphorylase
58	<a href="#">d1jv1a_</a>		not modelled	6.6	14	<b>PDB header:</b> oxygenase <b>Chain:</b> A: <b>PDB Molecule:</b> phenylacetone monooxygenase; <b>PDBTitle:</b> phenylacetone monooxygenase, a baeyer-villiger2 monooxygenase
59	<a href="#">d1s3ia2</a>		not modelled	6.6	26	<b>Fold:</b> Formyltransferase <b>Superfamily:</b> Formyltransferase <b>Family:</b> Formyltransferase
60	<a href="#">c1w4xA_</a>		not modelled	6.4	27	<b>PDB header:</b> transferase <b>Chain:</b> B: <b>PDB Molecule:</b> utp--glucose-1-phosphate uridylyltransferase; <b>PDBTitle:</b> crystal structure of upg1p
61	<a href="#">d2f4za1</a>		not modelled	6.4	31	<b>Fold:</b> UBC-like <b>Superfamily:</b> UBC-like <b>Family:</b> UBC-related
62	<a href="#">d1vm8a_</a>		not modelled	6.3	17	<b>Fold:</b> Nucleotide-diphospho-sugar transferases <b>Superfamily:</b> Nucleotide-diphospho-sugar transferases <b>Family:</b> UDP-glucose pyrophosphorylase
63	<a href="#">c2i5kB_</a>		not modelled	6.3	14	<b>PDB header:</b> transferase <b>Chain:</b> B: <b>PDB Molecule:</b> utp--glucose-1-phosphate uridylyltransferase; <b>PDBTitle:</b> crystal structure of upg1p
64	<a href="#">d1w4xa1</a>		not modelled	6.3	29	<b>Fold:</b> FAD/NAD(P)-binding domain <b>Superfamily:</b> FAD/NAD(P)-binding domain <b>Family:</b> FAD/NAD-linked reductases, N-terminal and central domains
65	<a href="#">c3q0iA_</a>		not modelled	6.2	14	<b>PDB header:</b> transferase <b>Chain:</b> A: <b>PDB Molecule:</b> methionyl-trna formyltransferase; <b>PDBTitle:</b> methionyl-trna formyltransferase from <i>vibrio cholerae</i>
66	<a href="#">d2icya2</a>		not modelled	6.2	15	<b>Fold:</b> Nucleotide-diphospho-sugar transferases <b>Superfamily:</b> Nucleotide-diphospho-sugar transferases <b>Family:</b> UDP-glucose pyrophosphorylase
67	<a href="#">d1vl6a1</a>		not modelled	6.0	42	<b>Fold:</b> NAD(P)-binding Rossmann-fold domains <b>Superfamily:</b> NAD(P)-binding Rossmann-fold domains <b>Family:</b> Aminoacid dehydrogenase-like, C-terminal domain
68	<a href="#">c2yr6A_</a>		not modelled	6.0	25	<b>PDB header:</b> oxidoreductase <b>Chain:</b> A: <b>PDB Molecule:</b> pro-enzyme of L-phenylalanine oxidase; <b>PDBTitle:</b> crystal structure of L-phenylalanine oxidase from <i>psuedomonas sp.p501</i>
69	<a href="#">d1o0sa1</a>		not modelled	5.9	21	<b>Fold:</b> NAD(P)-binding Rossmann-fold domains <b>Superfamily:</b> NAD(P)-binding Rossmann-fold domains <b>Family:</b> Aminoacid dehydrogenase-like, C-terminal domain
70	<a href="#">c1zghA_</a>		not modelled	5.8	36	<b>PDB header:</b> transferase <b>Chain:</b> A: <b>PDB Molecule:</b> methionyl-trna formyltransferase; <b>PDBTitle:</b> methionyl-trna formyltransferase from <i>clostridium thermocellum</i>
71	<a href="#">d2vgna2</a>		not modelled	5.7	29	<b>Fold:</b> Ribonuclease H-like motif <b>Superfamily:</b> Translational machinery components <b>Family:</b> ERF1/Dom34 middle domain-like
72	<a href="#">c3rf1B_</a>		not modelled	5.7	14	<b>PDB header:</b> ligase <b>Chain:</b> B: <b>PDB Molecule:</b> glycyl-trna synthetase alpha subunit; <b>PDBTitle:</b> the crystal structure of glycyl-trna synthetase subunit alpha from <i>campylobacter jejuni</i> subsp. <i>jejuni</i> nctc 11168
73	<a href="#">d1gq2a1</a>		not modelled	5.6	37	<b>Fold:</b> NAD(P)-binding Rossmann-fold domains <b>Superfamily:</b> NAD(P)-binding Rossmann-fold domains <b>Family:</b> Aminoacid dehydrogenase-like, C-terminal domain
74	<a href="#">c3tqqA_</a>		not modelled	5.6	17	<b>PDB header:</b> transferase <b>Chain:</b> A: <b>PDB Molecule:</b> methionyl-trna formyltransferase; <b>PDBTitle:</b> structure of the methionyl-trna formyltransferase (fmt) from <i>coxiella burnetii</i>
75	<a href="#">c2vkzH_</a>		not modelled	5.6	13	<b>PDB header:</b> transferase <b>Chain:</b> H: <b>PDB Molecule:</b> fatty acid synthase subunit beta; <b>PDBTitle:</b> structure of the cerulenin-inhibited fungal fatty acid2 synthase type i multienzyme complex
76	<a href="#">d1w44a_</a>		not modelled	5.5	33	<b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases <b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases <b>Family:</b> RecA protein-like (ATPase-domain)
77	<a href="#">d2igs1a</a>		not modelled	5.5	41	<b>Fold:</b> Lysozyme-like <b>Superfamily:</b> Lysozyme-like

78	<a href="#">c3louB_</a>		Alignment	not modelled	5.1	12	<b>Family:</b> PA2222-like <b>PDB header:</b> hydrolase <b>Chain:</b> B; <b>PDB Molecule:</b> formyltetrahydrofolate deformylase; <b>PDBTitle:</b> crystal structure of formyltetrahydrofolate deformylase (yp_105254.1)2 from burkholderia mallei atcc 23344 at 1.90 a resolution
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