

# Phyre<sup>2</sup>

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Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c2kmgA_			100.0	42	<b>PDB header:</b> gene regulation <b>Chain:</b> A: <b>PDB Molecule:</b> klca; <b>PDBTitle:</b> the structure of the klca and ardb proteins show a novel fold and antirestriction activity against type i dna3 restriction systems in vivo but not in vitro
2	c2wj9A_			100.0	70	<b>PDB header:</b> hydrolase inhibitor <b>Chain:</b> A: <b>PDB Molecule:</b> intergenic-region protein; <b>PDBTitle:</b> ardb
3	d2v6ai1			41.7	25	<b>Fold:</b> RuBisCO, small subunit <b>Superfamily:</b> RuBisCO, small subunit <b>Family:</b> RuBisCO, small subunit
4	d1gk8i_			37.0	25	<b>Fold:</b> RuBisCO, small subunit <b>Superfamily:</b> RuBisCO, small subunit <b>Family:</b> RuBisCO, small subunit
5	d8ruci_			32.4	33	<b>Fold:</b> RuBisCO, small subunit <b>Superfamily:</b> RuBisCO, small subunit <b>Family:</b> RuBisCO, small subunit
6	c2qsgX_			30.9	40	<b>PDB header:</b> dna binding protein/dna <b>Chain:</b> X: <b>PDB Molecule:</b> uv excision repair protein rad23; <b>PDBTitle:</b> crystal structure of rad4-rad23 bound to a uv-damaged dna
7	d1uzdc1			30.7	33	<b>Fold:</b> RuBisCO, small subunit <b>Superfamily:</b> RuBisCO, small subunit <b>Family:</b> RuBisCO, small subunit
8	d1x3zb1			30.5	40	<b>Fold:</b> XPC-binding domain <b>Superfamily:</b> XPC-binding domain <b>Family:</b> XPC-binding domain
9	d1wdds_			30.4	33	<b>Fold:</b> RuBisCO, small subunit <b>Superfamily:</b> RuBisCO, small subunit <b>Family:</b> RuBisCO, small subunit
10	d1ej7s_			29.3	33	<b>Fold:</b> RuBisCO, small subunit <b>Superfamily:</b> RuBisCO, small subunit <b>Family:</b> RuBisCO, small subunit
11	d2tssa2			28.4	29	<b>Fold:</b> beta-Grasp (ubiquitin-like) <b>Superfamily:</b> Superantigen toxins, C-terminal domain <b>Family:</b> Superantigen toxins, C-terminal domain

12	<a href="#">d1uzhc1</a>			22.1	17	<b>Fold:</b> RuBisCO, small subunit <b>Superfamily:</b> RuBisCO, small subunit <b>Family:</b> RuBisCO, small subunit
13	<a href="#">d1m15a1</a>			20.7	29	<b>Fold:</b> Guanido kinase N-terminal domain <b>Superfamily:</b> Guanido kinase N-terminal domain <b>Family:</b> Guanido kinase N-terminal domain
14	<a href="#">d1qh4a1</a>			18.5	29	<b>Fold:</b> Guanido kinase N-terminal domain <b>Superfamily:</b> Guanido kinase N-terminal domain <b>Family:</b> Guanido kinase N-terminal domain
15	<a href="#">d1rls_</a>			17.3	33	<b>Fold:</b> RuBisCO, small subunit <b>Superfamily:</b> RuBisCO, small subunit <b>Family:</b> RuBisCO, small subunit
16	<a href="#">d1vrpa1</a>			17.3	29	<b>Fold:</b> Guanido kinase N-terminal domain <b>Superfamily:</b> Guanido kinase N-terminal domain <b>Family:</b> Guanido kinase N-terminal domain
17	<a href="#">d1u6ra1</a>			17.2	21	<b>Fold:</b> Guanido kinase N-terminal domain <b>Superfamily:</b> Guanido kinase N-terminal domain <b>Family:</b> Guanido kinase N-terminal domain
18	<a href="#">d1i0ea1</a>			16.5	21	<b>Fold:</b> Guanido kinase N-terminal domain <b>Superfamily:</b> Guanido kinase N-terminal domain <b>Family:</b> Guanido kinase N-terminal domain
19	<a href="#">d1g0wa1</a>			16.4	29	<b>Fold:</b> Guanido kinase N-terminal domain <b>Superfamily:</b> Guanido kinase N-terminal domain <b>Family:</b> Guanido kinase N-terminal domain
20	<a href="#">d1crka1</a>			16.3	14	<b>Fold:</b> Guanido kinase N-terminal domain <b>Superfamily:</b> Guanido kinase N-terminal domain <b>Family:</b> Guanido kinase N-terminal domain
21	<a href="#">d1qk1a1</a>		not modelled	15.9	14	<b>Fold:</b> Guanido kinase N-terminal domain <b>Superfamily:</b> Guanido kinase N-terminal domain <b>Family:</b> Guanido kinase N-terminal domain
22	<a href="#">d1rbli_</a>		not modelled	15.6	17	<b>Fold:</b> RuBisCO, small subunit <b>Superfamily:</b> RuBisCO, small subunit <b>Family:</b> RuBisCO, small subunit
23	<a href="#">d1bxni_</a>		not modelled	14.7	17	<b>Fold:</b> RuBisCO, small subunit <b>Superfamily:</b> RuBisCO, small subunit <b>Family:</b> RuBisCO, small subunit
24	<a href="#">d1bwvs_</a>		not modelled	14.3	17	<b>Fold:</b> RuBisCO, small subunit <b>Superfamily:</b> RuBisCO, small subunit <b>Family:</b> RuBisCO, small subunit
25	<a href="#">d1svdm1</a>		not modelled	14.1	14	<b>Fold:</b> RuBisCO, small subunit <b>Superfamily:</b> RuBisCO, small subunit <b>Family:</b> RuBisCO, small subunit
26	<a href="#">d1enfa2</a>		not modelled	13.5	18	<b>Fold:</b> beta-Grasp (ubiquitin-like) <b>Superfamily:</b> Superantigen toxins, C-terminal domain <b>Family:</b> Superantigen toxins, C-terminal domain
27	<a href="#">c3lo4B_</a>		not modelled	12.2	44	<b>PDB header:</b> antimicrobial protein <b>Chain:</b> B: <b>PDB Molecule:</b> neutrophil defensin 1; <b>PDBTitle:</b> crystal structure of human alpha-defensin 1 (r24a mutant)
28	<a href="#">c3lo4A_</a>		not modelled	12.2	44	<b>PDB header:</b> antimicrobial protein <b>Chain:</b> A: <b>PDB Molecule:</b> neutrophil defensin 1; <b>PDBTitle:</b> crystal structure of human alpha-defensin 1 (r24a mutant)
29	<a href="#">d1y0ua_</a>		not modelled	10.6	32	<b>Fold:</b> DNA/RNA-binding 3-helical bundle <b>Superfamily:</b> "Winged helix" DNA-binding domain

Family:ArSR-like transcriptional regulators					
30	<a href="#">c1ck1A_</a>	Alignment	not modelled	10.3	41
					<b>PDB header:</b> toxin <b>Chain:</b> A: <b>PDB Molecule:</b> protein (enterotoxin type c-3); <b>PDBTitle:</b> structure of staphylococcal enterotoxin c3
31	<a href="#">c1xxgA_</a>	Alignment	not modelled	10.2	26
					<b>PDB header:</b> immune system <b>Chain:</b> A: <b>PDB Molecule:</b> enterotoxin; <b>PDBTitle:</b> crystal structure of staphylococcal enterotoxin g
32	<a href="#">d1ks8a_</a>	Alignment	not modelled	10.1	9
					<b>Fold:</b> alpha/alpha toroid <b>Superfamily:</b> Six-hairpin glycosidases <b>Family:</b> Cellulases catalytic domain
33	<a href="#">c3cinA_</a>	Alignment	not modelled	9.2	23
					<b>PDB header:</b> isomerase <b>Chain:</b> A: <b>PDB Molecule:</b> myo-inositol-1-phosphate synthase-related protein; <b>PDBTitle:</b> crystal structure of a myo-inositol-1-phosphate synthase-related2 protein (tm_1419) from thermotoga maritima msb8 at 1.70 a resolution
34	<a href="#">c1et9A_</a>	Alignment	not modelled	8.8	29
					<b>PDB header:</b> immune system <b>Chain:</b> A: <b>PDB Molecule:</b> superantigen spe-h; <b>PDBTitle:</b> crystal structure of the superantigen spe-h from2 streptococcus pyogenes
35	<a href="#">d2dawa1</a>	Alignment	not modelled	8.5	11
					<b>Fold:</b> UBC-like <b>Superfamily:</b> UBC-like <b>Family:</b> RWD domain
36	<a href="#">d2z8la2</a>	Alignment	not modelled	8.3	12
					<b>Fold:</b> beta-Grasp (ubiquitin-like) <b>Superfamily:</b> Superantigen toxins, C-terminal domain <b>Family:</b> Superantigen toxins, C-terminal domain
37	<a href="#">c1d6eC_</a>	Alignment	not modelled	8.2	31
					<b>PDB header:</b> immune system/peptide inhibitor <b>Chain:</b> C: <b>PDB Molecule:</b> enterotoxin type b; <b>PDBTitle:</b> crystal structure of hla-dr4 complex with peptidomimetic and seb
38	<a href="#">d2daxa1</a>	Alignment	not modelled	8.1	13
					<b>Fold:</b> UBC-like <b>Superfamily:</b> UBC-like <b>Family:</b> RWD domain
39	<a href="#">c1bxta_</a>	Alignment	not modelled	7.8	35
					<b>PDB header:</b> immune system <b>Chain:</b> A: <b>PDB Molecule:</b> protein (streptococcal superantigen); <b>PDBTitle:</b> streptococcal superantigen (ssa) from streptococcus pyogenes
40	<a href="#">c2j4xA_</a>	Alignment	not modelled	7.1	12
					<b>PDB header:</b> signaling protein <b>Chain:</b> A: <b>PDB Molecule:</b> mitogen; <b>PDBTitle:</b> streptococcus dysgalactiae-derived mitogen (sdm)
41	<a href="#">c1uliC_</a>	Alignment	not modelled	6.4	18
					<b>PDB header:</b> isomerase <b>Chain:</b> C: <b>PDB Molecule:</b> myo-inositol-1-phosphate synthase; <b>PDBTitle:</b> myo-inositol phosphate synthase mips from a. fulgidus
42	<a href="#">c2hg7A_</a>	Alignment	not modelled	6.2	25
					<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> phage-like element pbsx protein xkdw; <b>PDBTitle:</b> solution nmr structure of phage-like element pbsx protein2 xkdw, northeast structural genomics consortium target sr355
43	<a href="#">d2hg7a1</a>	Alignment	not modelled	6.2	25
					<b>Fold:</b> gpW/XkdW-like <b>Superfamily:</b> XkdW-like <b>Family:</b> XkdW-like
44	<a href="#">c1uupA_</a>	Alignment	not modelled	6.1	29
					<b>PDB header:</b> toxin <b>Chain:</b> A: <b>PDB Molecule:</b> exotoxin type a; <b>PDBTitle:</b> crystal structure of a dimeric form of streptococcal2 pyrogenic exotoxin a (spea).
45	<a href="#">c3bmaC_</a>	Alignment	not modelled	6.0	15
					<b>PDB header:</b> ligase <b>Chain:</b> C: <b>PDB Molecule:</b> d-alanyl-lipoteichoic acid synthetase; <b>PDBTitle:</b> crystal structure of d-alanyl-lipoteichoic acid synthetase from2 streptococcus pneumoniae r6
46	<a href="#">c2ij0A_</a>	Alignment	not modelled	5.4	29
					<b>PDB header:</b> protein binding <b>Chain:</b> A: <b>PDB Molecule:</b> toxic shock syndrome toxin-1; <b>PDBTitle:</b> structural basis of t cell specificity and activation by2 the bacterial superantigen toxic shock syndrome toxin-1
47	<a href="#">c3cxbA_</a>	Alignment	not modelled	5.4	20
					<b>PDB header:</b> signaling protein <b>Chain:</b> A: <b>PDB Molecule:</b> protein sifa; <b>PDBTitle:</b> crystal structure of sifa and skip
48	<a href="#">c1ktkB_</a>	Alignment	not modelled	5.3	18
					<b>PDB header:</b> immune system <b>Chain:</b> B: <b>PDB Molecule:</b> exotoxin type c; <b>PDBTitle:</b> complex of streptococcal pyrogenic enterotoxin c (spec)2 with a human t cell receptor beta chain (vbeta2.1)
49	<a href="#">d1x4ka2</a>	Alignment	not modelled	5.3	38
					<b>Fold:</b> Glucocorticoid receptor-like (DNA-binding domain) <b>Superfamily:</b> Glucocorticoid receptor-like (DNA-binding domain) <b>Family:</b> LIM domain
50	<a href="#">c1zfuA_</a>	Alignment	not modelled	5.2	50
					<b>PDB header:</b> antimicrobial protein <b>Chain:</b> A: <b>PDB Molecule:</b> plectasin; <b>PDBTitle:</b> plectasin:a peptide antibiotic with therapeutic potential2 from a saprophytic fungus
51	<a href="#">c2vg2C_</a>	Alignment	not modelled	5.0	18
					<b>PDB header:</b> transferase <b>Chain:</b> C: <b>PDB Molecule:</b> undecaprenyl pyrophosphate synthetase; <b>PDBTitle:</b> rv2361 with ipp