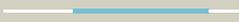
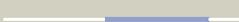
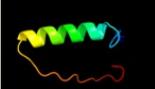
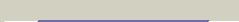
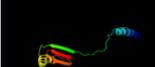
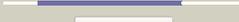
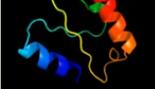


# Phyre2

Email	I.a.kelley@imperial.ac.uk
Description	P64614
Date	Wed Jan 25 15:21:00 GMT 2012
Unique Job ID	4fb8efb9b8bf9656

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	<a href="#">d2jnaa1</a>	 Alignment		100.0	41	<b>Fold:</b> Dodecin subunit-like <b>Superfamily:</b> YdgH-like <b>Family:</b> YdgH-like
2	<a href="#">d2noca1</a>	 Alignment		100.0	36	<b>Fold:</b> Dodecin subunit-like <b>Superfamily:</b> YdgH-like <b>Family:</b> YdgH-like
3	<a href="#">c1oy8A_</a>	 Alignment		48.0	15	<b>PDB header:</b> membrane protein <b>Chain:</b> A: <b>PDB Molecule:</b> acriflavine resistance protein b; <b>PDBTitle:</b> structural basis of multiple drug binding capacity of the acrb2 multidrug efflux pump
4	<a href="#">c2k4qA_</a>	 Alignment		39.9	14	<b>PDB header:</b> viral protein <b>Chain:</b> A: <b>PDB Molecule:</b> major tail protein v; <b>PDBTitle:</b> the solution structure of gpv, the major tail protein from2 bacteriophage lambda
5	<a href="#">c3dfeA_</a>	 Alignment		36.2	27	<b>PDB header:</b> signaling protein <b>Chain:</b> A: <b>PDB Molecule:</b> putative pii-like signaling protein; <b>PDBTitle:</b> crystal structure of a putative pii-like signaling protein2 (yp_323533.1) from anabaena variabilis atcc 29413 at 2.35 a3 resolution
6	<a href="#">c3b9nB_</a>	 Alignment		31.1	16	<b>PDB header:</b> oxidoreductase <b>Chain:</b> B: <b>PDB Molecule:</b> alkane monooxygenase; <b>PDBTitle:</b> crystal structure of long-chain alkane monooxygenase (lada)
7	<a href="#">c1hl8B_</a>	 Alignment		25.4	13	<b>PDB header:</b> hydrolase <b>Chain:</b> B: <b>PDB Molecule:</b> putative alpha-l-fucosidase; <b>PDBTitle:</b> crystal structure of thermotoga maritima alpha-fucosidase
8	<a href="#">c3no4A_</a>	 Alignment		22.3	16	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> creatinine amidohydrolase; <b>PDBTitle:</b> crystal structure of a creatinine amidohydrolase (npun_f1913) from2 nostoc punctiforme pcc 73102 at 2.00 a resolution
9	<a href="#">c3lubE_</a>	 Alignment		21.4	11	<b>PDB header:</b> hydrolase <b>Chain:</b> E: <b>PDB Molecule:</b> putative creatinine amidohydrolase; <b>PDBTitle:</b> crystal structure of putative creatinine amidohydrolase2 (yp_211512.1) from bacteroides fragilis nctc 9343 at 2.11 a3 resolution
10	<a href="#">c3k07A_</a>	 Alignment		19.6	6	<b>PDB header:</b> transport protein <b>Chain:</b> A: <b>PDB Molecule:</b> cation efflux system protein cusa; <b>PDBTitle:</b> crystal structure of cusa
11	<a href="#">c3dnfB_</a>	 Alignment		18.6	16	<b>PDB header:</b> oxidoreductase <b>Chain:</b> B: <b>PDB Molecule:</b> 4-hydroxy-3-methylbut-2-enyl diphosphate reductase; <b>PDBTitle:</b> structure of (e)-4-hydroxy-3-methyl-but-2-enyl diphosphate reductase,2 the terminal enzyme of the non-mevalonate pathway

12	<a href="#">d1tqxa_</a>	Alignment		18.5	26	<b>Fold:</b> TIM beta/alpha-barrel <b>Superfamily:</b> Ribulose-phosphate binding barrel <b>Family:</b> D-ribulose-5-phosphate 3-epimerase
13	<a href="#">c3eypB_</a>	Alignment		18.2	13	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> B: <b>PDB Molecule:</b> putative alpha-L-fucosidase; <b>PDBTitle:</b> crystal structure of putative alpha-L-fucosidase from bacteroides2 thetaiotaomicron
14	<a href="#">c3mo4B_</a>	Alignment		17.8	8	<b>PDB header:</b> hydrolase <b>Chain:</b> B: <b>PDB Molecule:</b> alpha-1,3/4-fucosidase; <b>PDBTitle:</b> the crystal structure of an alpha-(1-3,4)-fucosidase from2 bifidobacterium longum subsp. infantis atcc 15697
15	<a href="#">c3sdoB_</a>	Alignment		16.7	13	<b>PDB header:</b> oxidoreductase <b>Chain:</b> B: <b>PDB Molecule:</b> nitrilotriacetate monooxygenase; <b>PDBTitle:</b> structure of a nitrilotriacetate monooxygenase from burkholderia2 pseudomallei
16	<a href="#">c3ke8A_</a>	Alignment		16.6	15	<b>PDB header:</b> oxidoreductase <b>Chain:</b> A: <b>PDB Molecule:</b> 4-hydroxy-3-methylbut-2-enyl diphosphate <b>PDBTitle:</b> crystal structure of isph:hmbpp-complex
17	<a href="#">d3etja1</a>	Alignment		15.9	10	<b>Fold:</b> Barrel-sandwich hybrid <b>Superfamily:</b> Rudiment single hybrid motif <b>Family:</b> BC C-terminal domain-like
18	<a href="#">d1kjqal</a>	Alignment		14.8	18	<b>Fold:</b> Barrel-sandwich hybrid <b>Superfamily:</b> Rudiment single hybrid motif <b>Family:</b> BC C-terminal domain-like
19	<a href="#">d1v7za_</a>	Alignment		14.2	13	<b>Fold:</b> Creatininase <b>Superfamily:</b> Creatininase <b>Family:</b> Creatininase
20	<a href="#">d1luca_</a>	Alignment		13.9	8	<b>Fold:</b> TIM beta/alpha-barrel <b>Superfamily:</b> Bacterial luciferase-like <b>Family:</b> Bacterial luciferase (alkanal monooxygenase)
21	<a href="#">d1f07a_</a>	Alignment	not modelled	13.4	20	<b>Fold:</b> TIM beta/alpha-barrel <b>Superfamily:</b> Bacterial luciferase-like <b>Family:</b> F420 dependent oxidoreductases
22	<a href="#">d1hl9a2</a>	Alignment	not modelled	13.4	13	<b>Fold:</b> TIM beta/alpha-barrel <b>Superfamily:</b> (Trans)glycosidases <b>Family:</b> Putative alpha-L-fucosidase, catalytic domain
23	<a href="#">c3qkbB_</a>	Alignment	not modelled	12.9	24	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> B: <b>PDB Molecule:</b> uncharacterized protein; <b>PDBTitle:</b> crystal structure of a protein with unknown function which belongs to2 pfam duf74 family (pepe_0654) from pediococcus pentosaceus atcc 257453 at 2.73 a resolution <b>PDB header:</b> hydrolase
24	<a href="#">c2wvsD_</a>	Alignment	not modelled	12.5	25	<b>Chain:</b> D: <b>PDB Molecule:</b> alpha-L-fucosidase; <b>PDBTitle:</b> crystal structure of an alpha-L-fucosidase gh29 trapped2 covalent intermediate from bacteroides thetaiotaomicron in3 complex with 2-fluoro-fucosyl fluoride using an e288q4 mutant
25	<a href="#">c3rofA_</a>	Alignment	not modelled	11.9	12	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> low molecular weight protein-tyrosine-phosphatase ptpa; <b>PDBTitle:</b> crystal structure of the s. aureus protein tyrosine phosphatase ptpa
26	<a href="#">d1lucb_</a>	Alignment	not modelled	11.1	12	<b>Fold:</b> TIM beta/alpha-barrel <b>Superfamily:</b> Bacterial luciferase-like <b>Family:</b> Bacterial luciferase (alkanal monooxygenase)
27	<a href="#">d1txka2</a>	Alignment	not modelled	10.7	21	<b>Fold:</b> Supersandwich <b>Superfamily:</b> Galactose mutarotase-like <b>Family:</b> MdoG-like
28	<a href="#">c1txkA_</a>	Alignment	not modelled	10.3	21	<b>PDB header:</b> biosynthetic protein <b>Chain:</b> A: <b>PDB Molecule:</b> glucans biosynthesis protein g;

						<b>PDBTitle:</b> crystal structure of escherichia coli oppg
29	<a href="#">c1f02T_</a>	Alignment	not modelled	9.9	33	<b>PDB header:</b> cell adhesion <b>Chain:</b> T; <b>PDB Molecule:</b> translocated intimin receptor; <b>PDBTitle:</b> crystal structure of c-terminal 282-residue fragment of2 intimin in complex with translocated intimin receptor3 (tir) intimin-binding domain
30	<a href="#">d1nfpa_</a>	Alignment	not modelled	9.9	13	<b>Fold:</b> TIM beta/alpha-barrel <b>Superfamily:</b> Bacterial luciferase-like <b>Family:</b> Non-fluorescent flavoprotein (LuxF, FP390)
31	<a href="#">c2y1bA_</a>	Alignment	not modelled	9.8	20	<b>PDB header:</b> membrane protein <b>Chain:</b> A; <b>PDB Molecule:</b> putative outer membrane protein, signal; <b>PDBTitle:</b> crystal structure of the e. coli outer membrane lipoprotein2 rcsf
32	<a href="#">c2jz7A_</a>	Alignment	not modelled	8.5	25	<b>PDB header:</b> selenium-binding protein <b>Chain:</b> A; <b>PDB Molecule:</b> selenium binding protein; <b>PDBTitle:</b> solution nmr structure of selenium-binding protein from2 methanococcus vannielii
33	<a href="#">d1rpxa_</a>	Alignment	not modelled	8.3	23	<b>Fold:</b> TIM beta/alpha-barrel <b>Superfamily:</b> Ribulose-phosphate binding barrel <b>Family:</b> D-ribulose-5-phosphate 3-epimerase
34	<a href="#">c2w1sB_</a>	Alignment	not modelled	7.8	19	<b>PDB header:</b> hydrolase <b>Chain:</b> B; <b>PDB Molecule:</b> hyaluronoglucosaminidase; <b>PDBTitle:</b> unique ligand binding specificity of a family 322 carbohydrate-binding module from the mu toxin produced by3 clostridium perfringens
35	<a href="#">c3gzaB_</a>	Alignment	not modelled	7.6	13	<b>PDB header:</b> hydrolase <b>Chain:</b> B; <b>PDB Molecule:</b> putative alpha-l-fucosidase; <b>PDBTitle:</b> crystal structure of putative alpha-l-fucosidase (np_812709.1) from2 bacteroides thetaiotaomicron vpi-5482 at 1.60 a resolution
36	<a href="#">d1h1ya_</a>	Alignment	not modelled	7.5	13	<b>Fold:</b> TIM beta/alpha-barrel <b>Superfamily:</b> Ribulose-phosphate binding barrel <b>Family:</b> D-ribulose-5-phosphate 3-epimerase
37	<a href="#">c1z69D_</a>	Alignment	not modelled	7.2	13	<b>PDB header:</b> oxidoreductase <b>Chain:</b> D; <b>PDB Molecule:</b> coenzyme f420-dependent n(5),n(10)- <b>PDBTitle:</b> crystal structure of methylenetetrahydromethanopterin2 reductase (mer) in complex with coenzyme f420
38	<a href="#">c2i7gA_</a>	Alignment	not modelled	7.1	13	<b>PDB header:</b> oxidoreductase <b>Chain:</b> A; <b>PDB Molecule:</b> monooxygenase; <b>PDBTitle:</b> crystal structure of monooxygenase from agrobacterium tumefaciens
39	<a href="#">c2k38A_</a>	Alignment	not modelled	7.0	25	<b>PDB header:</b> antimicrobial protein <b>Chain:</b> A; <b>PDB Molecule:</b> cupiennin-1a; <b>PDBTitle:</b> cupiennin 1a, nmr, minimized average structure
40	<a href="#">c3ir9A_</a>	Alignment	not modelled	6.9	11	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> A; <b>PDB Molecule:</b> peptide chain release factor subunit 1; <b>PDBTitle:</b> c-terminal domain of peptide chain release factor from2 methanosarcina mazei.
41	<a href="#">d1r3sa_</a>	Alignment	not modelled	6.7	15	<b>Fold:</b> TIM beta/alpha-barrel <b>Superfamily:</b> UROD/MetE-like <b>Family:</b> Uroporphyrinogen decarboxylase, UROD
42	<a href="#">c3qc3B_</a>	Alignment	not modelled	6.4	13	<b>PDB header:</b> isomerase <b>Chain:</b> B; <b>PDB Molecule:</b> d-ribulose-5-phosphate-3-epimerase; <b>PDBTitle:</b> crystal structure of a d-ribulose-5-phosphate-3-epimerase (np_954699)2 from homo sapiens at 2.20 a resolution
43	<a href="#">d2flia1</a>	Alignment	not modelled	6.3	23	<b>Fold:</b> TIM beta/alpha-barrel <b>Superfamily:</b> Ribulose-phosphate binding barrel <b>Family:</b> D-ribulose-5-phosphate 3-epimerase
44	<a href="#">d1l7ba_</a>	Alignment	not modelled	6.2	31	<b>Fold:</b> BRCT domain <b>Superfamily:</b> BRCT domain <b>Family:</b> DNA ligase
45	<a href="#">d1nqka_</a>	Alignment	not modelled	6.2	13	<b>Fold:</b> TIM beta/alpha-barrel <b>Superfamily:</b> Bacterial luciferase-like <b>Family:</b> Ssud-like monooxygenases
46	<a href="#">c2gi4A_</a>	Alignment	not modelled	6.2	15	<b>PDB header:</b> hydrolase <b>Chain:</b> A; <b>PDB Molecule:</b> possible phosphotyrosine protein phosphatase; <b>PDBTitle:</b> solution structure of the low molecular weight protein2 tyrosine phosphatase from campylobacter jejuni.
47	<a href="#">d1p5vb_</a>	Alignment	not modelled	6.1	13	<b>Fold:</b> Common fold of diphtheria toxin/transcription factors/cytochrome f <b>Superfamily:</b> Bacterial adhesins <b>Family:</b> Pilus subunits
48	<a href="#">c2cokA_</a>	Alignment	not modelled	6.0	15	<b>PDB header:</b> transferase <b>Chain:</b> A; <b>PDB Molecule:</b> poly [adp-ribose] polymerase-1; <b>PDBTitle:</b> solution structure of brct domain of poly(adp-ribose)2 polymerase-1
49	<a href="#">c2zfdB_</a>	Alignment	not modelled	5.5	15	<b>PDB header:</b> signaling protein/transferase <b>Chain:</b> B; <b>PDB Molecule:</b> putative uncharacterized protein t20l15_90; <b>PDBTitle:</b> the crystal structure of plant specific calcium binding protein atcbl22 in complex with the regulatory domain of atcpk14
50	<a href="#">d1tvla_</a>	Alignment	not modelled	5.5	8	<b>Fold:</b> TIM beta/alpha-barrel <b>Superfamily:</b> Bacterial luciferase-like <b>Family:</b> Ssud-like monooxygenases
51	<a href="#">c1tvIA_</a>	Alignment	not modelled	5.5	8	<b>PDB header:</b> oxidoreductase <b>Chain:</b> A; <b>PDB Molecule:</b> protein ytnj; <b>PDBTitle:</b> structure of ytnj from bacillus subtilis
52	<a href="#">d2g39a1</a>	Alignment	not modelled	5.4	31	<b>Fold:</b> NagB/RpiA/CoA transferase-like <b>Superfamily:</b> NagB/RpiA/CoA transferase-like <b>Family:</b> CoA transferase alpha subunit-like
53	<a href="#">d1mnta_</a>	Alignment	not modelled	5.3	50	<b>Fold:</b> Ribbon-helix-helix <b>Superfamily:</b> Ribbon-helix-helix <b>Family:</b> Arc/Mnt-like phage repressors

54	<a href="#">d1cdwa2</a>	Alignment	not modelled	5.1	25	<b>Fold:</b> TBP-like <b>Superfamily:</b> TATA-box binding protein-like <b>Family:</b> TATA-box binding protein (TBP), C-terminal domain
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