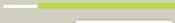
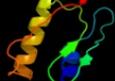
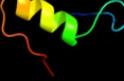
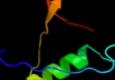
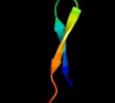
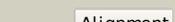
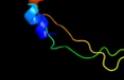
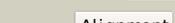
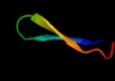
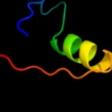
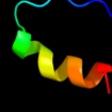
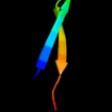


# Phyre2

Email	l.a.kelley@imperial.ac.uk
Description	P64479
Date	Thu Jan 5 12:08:47 GMT 2012
Unique Job ID	3e120bb7d19fbced

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	<a href="#">d1spbp_</a>	 Alignment		61.2	13	<b>Fold:</b> Ferredoxin-like <b>Superfamily:</b> Protease propeptides/inhibitors <b>Family:</b> Subtilase propeptides/inhibitors
2	<a href="#">d2hiya1</a>	 Alignment		35.3	20	<b>Fold:</b> SP0830-like <b>Superfamily:</b> SP0830-like <b>Family:</b> SP0830-like
3	<a href="#">d2f5va2</a>	 Alignment		22.4	10	<b>Fold:</b> FAD-linked reductases, C-terminal domain <b>Superfamily:</b> FAD-linked reductases, C-terminal domain <b>Family:</b> GMC oxidoreductases
4	<a href="#">d2aw0a_</a>	 Alignment		18.4	30	<b>Fold:</b> Ferredoxin-like <b>Superfamily:</b> HMA, heavy metal-associated domain <b>Family:</b> HMA, heavy metal-associated domain
5	<a href="#">d2bkfa1</a>	 Alignment		16.2	4	<b>Fold:</b> beta-Grasp (ubiquitin-like) <b>Superfamily:</b> CAD & PB1 domains <b>Family:</b> PB1 domain
6	<a href="#">c1ajnA_</a>	 Alignment		14.6	18	<b>PDB header:</b> antibiotic resistance <b>Chain:</b> A; <b>PDB Molecule:</b> penicillin amidohydrolase; <b>PDBTitle:</b> penicillin acylase complexed with p-nitrophenylacetic acid
7	<a href="#">c3cueH_</a>	 Alignment		14.4	9	<b>PDB header:</b> protein transport <b>Chain:</b> H; <b>PDB Molecule:</b> transport protein particle 31 kda subunit; <b>PDBTitle:</b> crystal structure of a trapp subassembly activating the rab2 ypt1p
8	<a href="#">d1kn6a_</a>	 Alignment		14.4	12	<b>Fold:</b> Ferredoxin-like <b>Superfamily:</b> Protease propeptides/inhibitors <b>Family:</b> Prohormone convertase 1 pro-domain
9	<a href="#">c1cp9A_</a>	 Alignment		12.8	18	<b>PDB header:</b> hydrolase <b>Chain:</b> A; <b>PDB Molecule:</b> penicillin amidohydrolase; <b>PDBTitle:</b> crystal structure of penicillin g acylase from the bro12 mutant strain of providencia rettgeri
10	<a href="#">c1gk9A_</a>	 Alignment		12.0	18	<b>PDB header:</b> antibiotic resistance <b>Chain:</b> A; <b>PDB Molecule:</b> penicillin g acylase alpha subunit; <b>PDBTitle:</b> crystal structures of penicillin acylase enzyme-substrate2 complexes: structural insights into the catalytic mechanism
11	<a href="#">c3k3wA_</a>	 Alignment		11.7	24	<b>PDB header:</b> hydrolase <b>Chain:</b> A; <b>PDB Molecule:</b> penicillin g acylase; <b>PDBTitle:</b> thermostable penicillin g acylase from alcaligence faecalis2 in orthorhombic form

12	<a href="#">d1pkxa1</a>	Alignment		10.9	25	<b>Fold:</b> Methylglyoxal synthase-like <b>Superfamily:</b> Methylglyoxal synthase-like <b>Family:</b> Inosinase
13	<a href="#">d1g8ma1</a>	Alignment		10.9	18	<b>Fold:</b> Methylglyoxal synthase-like <b>Superfamily:</b> Methylglyoxal synthase-like <b>Family:</b> Inosinase
14	<a href="#">c3kowH_</a>	Alignment		10.8	33	<b>PDB header:</b> metal binding protein <b>Chain:</b> H: <b>PDB Molecule:</b> d-ornithine aminomutase s component; <b>PDBTitle:</b> crystal structure of ornithine 4,5 aminomutase backsoaked complex
15	<a href="#">d1oeyj_</a>	Alignment		10.1	18	<b>Fold:</b> beta-Grasp (ubiquitin-like) <b>Superfamily:</b> CAD & PB1 domains <b>Family:</b> PB1 domain
16	<a href="#">c2kt2A_</a>	Alignment		10.0	17	<b>PDB header:</b> oxidoreductase <b>Chain:</b> A: <b>PDB Molecule:</b> mercuric reductase; <b>PDBTitle:</b> structure of nmer, the n-terminal hma domain of tn501 mercuric2 reductase
17	<a href="#">c3ce8A_</a>	Alignment		9.4	14	<b>PDB header:</b> unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> putative pii-like nitrogen regulatory protein; <b>PDBTitle:</b> crystal structure of a duf3240 family protein (sbal_0098) from2 shewanella baltica os155 at 2.40 a resolution
18	<a href="#">d1s6ua_</a>	Alignment		9.2	18	<b>Fold:</b> Ferredoxin-like <b>Superfamily:</b> HMA, heavy metal-associated domain <b>Family:</b> HMA, heavy metal-associated domain
19	<a href="#">d1zcca1</a>	Alignment		9.1	20	<b>Fold:</b> Methylglyoxal synthase-like <b>Superfamily:</b> Methylglyoxal synthase-like <b>Family:</b> Inosinase
20	<a href="#">c2wybA_</a>	Alignment		9.1	12	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> acyl-homoserine lactone acylase pvdq subunit <b>PDBTitle:</b> the quorum quenching n-acyl homoserine lactone acylase pvdq2 with a covalently bound dodecanoic acid
21	<a href="#">d1m32a_</a>	Alignment	not modelled	9.1	19	<b>Fold:</b> PLP-dependent transferase-like <b>Superfamily:</b> PLP-dependent transferases <b>Family:</b> Cystathionine synthase-like
22	<a href="#">c2dunA_</a>	Alignment	not modelled	9.1	12	<b>PDB header:</b> transferase <b>Chain:</b> A: <b>PDB Molecule:</b> dna polymerase mu; <b>PDBTitle:</b> solution structure of brct domain of dna polymerase mu
23	<a href="#">c1zr6A_</a>	Alignment	not modelled	8.9	24	<b>PDB header:</b> oxidoreductase <b>Chain:</b> A: <b>PDB Molecule:</b> glucooigosaccharide oxidase; <b>PDBTitle:</b> the crystal structure of an acremonium strictum glucooigosaccharide2 oxidase reveals a novel flavinylation
24	<a href="#">d1wxia1</a>	Alignment	not modelled	8.5	13	<b>Fold:</b> Adenine nucleotide alpha hydrolase-like <b>Superfamily:</b> Adenine nucleotide alpha hydrolases-like <b>Family:</b> N-type ATP pyrophosphatases
25	<a href="#">c3q4gA_</a>	Alignment	not modelled	8.5	15	<b>PDB header:</b> ligase <b>Chain:</b> A: <b>PDB Molecule:</b> nh(3)-dependent nad(+) synthetase; <b>PDBTitle:</b> structure of nad synthetase from vibrio cholerae
26	<a href="#">d1kjqaz</a>	Alignment	not modelled	8.2	13	<b>Fold:</b> PreATP-grasp domain <b>Superfamily:</b> PreATP-grasp domain <b>Family:</b> BC N-terminal domain-like
27	<a href="#">c3hbxB_</a>	Alignment	not modelled	7.8	13	<b>PDB header:</b> lyase <b>Chain:</b> B: <b>PDB Molecule:</b> glutamate decarboxylase 1; <b>PDBTitle:</b> crystal structure of gad1 from arabidopsis thaliana
28	<a href="#">c3dpiA_</a>	Alignment	not modelled	7.3	21	<b>PDB header:</b> ligase <b>Chain:</b> A: <b>PDB Molecule:</b> nad+ synthetase; <b>PDBTitle:</b> crystal structure of nad+ synthetase from burkholderia pseudomallei
						<b>PDB header:</b> transferase <b>Chain:</b> A: <b>PDB Molecule:</b> 2-amino-3-ketobutyrate coenzyme a

29	<a href="#">c3tqxA_</a>	Alignment	not modelled	7.0	11	ligase; <b>PDBTitle:</b> structure of the 2-amino-3-ketobutyrate coenzyme a ligase (kbl) from2 coxiella burnetii
30	<a href="#">d1d0na4</a>	Alignment	not modelled	6.9	17	<b>Fold:</b> Gelsolin-like <b>Superfamily:</b> Actin depolymerizing proteins <b>Family:</b> Gelsolin-like
31	<a href="#">d1tiba_</a>	Alignment	not modelled	6.9	6	<b>Fold:</b> alpha/beta-Hydrolases <b>Superfamily:</b> alpha/beta-Hydrolases <b>Family:</b> Fungal lipases
32	<a href="#">c1thzA_</a>	Alignment	not modelled	6.7	20	<b>PDB header:</b> transferase, hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> bifunctional purine biosynthesis protein purh; <b>PDBTitle:</b> crystal structure of avian aicar transformylase in complex2 with a novel inhibitor identified by virtual ligand3 screening
33	<a href="#">c2gcfA_</a>	Alignment	not modelled	6.6	19	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> cation-transporting atpase pacs; <b>PDBTitle:</b> solution structure of the n-terminal domain of the copppe(i) atpase2 pacs in its apo form
34	<a href="#">c4a1oB_</a>	Alignment	not modelled	6.5	24	<b>PDB header:</b> transferase-hydrolase <b>Chain:</b> B: <b>PDB Molecule:</b> bifunctional purine biosynthesis protein purh; <b>PDBTitle:</b> crystal structure of mycobacterium tuberculosis purh complexed with2 aicar and a novel nucleotide cfair, at 2.48 a resolution.
35	<a href="#">c2ae3A_</a>	Alignment	not modelled	6.4	24	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> glutaryl 7-aminocephalosporanic acid acylase; <b>PDBTitle:</b> glutaryl 7-aminocephalosporanic acid acylase: mutational study of2 activation mechanism
36	<a href="#">d1q5ya_</a>	Alignment	not modelled	6.3	33	<b>Fold:</b> Ferredoxin-like <b>Superfamily:</b> ACT-like <b>Family:</b> Nickel responsive regulator NikR, C-terminal domain
37	<a href="#">d1wj6a_</a>	Alignment	not modelled	6.0	4	<b>Fold:</b> beta-Grasp (ubiquitin-like) <b>Superfamily:</b> CAD & PB1 domains <b>Family:</b> PB1 domain
38	<a href="#">d2fg9a1</a>	Alignment	not modelled	5.9	19	<b>Fold:</b> Split barrel-like <b>Superfamily:</b> FMN-binding split barrel <b>Family:</b> PNP-oxidase like
39	<a href="#">c2jz7A_</a>	Alignment	not modelled	5.8	23	<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
40	<a href="#">c3flpj_</a>	Alignment	not modelled	5.7	14	<b>PDB header:</b> sugar binding protein <b>Chain:</b> J: <b>PDB Molecule:</b> sap-like pentraxin; <b>PDBTitle:</b> crystal structure of native heptameric sap-like pentraxin2 from limulus polyphemus
41	<a href="#">c3hqtB_</a>	Alignment	not modelled	5.5	15	<b>PDB header:</b> transferase <b>Chain:</b> B: <b>PDB Molecule:</b> cai-1 autoinducer synthase; <b>PDBTitle:</b> plp-dependent acyl-coa transferase cqsa
42	<a href="#">c2rmlA_</a>	Alignment	not modelled	5.4	16	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> copper-transporting p-type atpase copa; <b>PDBTitle:</b> solution structure of the n-terminal soluble domains of2 bacillus subtilis copa
43	<a href="#">d1scjb_</a>	Alignment	not modelled	5.4	16	<b>Fold:</b> Ferredoxin-like <b>Superfamily:</b> Protease propeptides/inhibitors <b>Family:</b> Subtilase propeptides/inhibitors
44	<a href="#">d1jmsa4</a>	Alignment	not modelled	5.4	10	<b>Fold:</b> Nucleotidyltransferase <b>Superfamily:</b> Nucleotidyltransferase <b>Family:</b> DNA polymerase beta-like
45	<a href="#">c3uowB_</a>	Alignment	not modelled	5.3	14	<b>PDB header:</b> ligase <b>Chain:</b> B: <b>PDB Molecule:</b> gmp synthetase; <b>PDBTitle:</b> crystal structure of pf10_0123, a gmp synthetase from plasmodium2 falciparum
46	<a href="#">c1zczA_</a>	Alignment	not modelled	5.2	16	<b>PDB header:</b> transferase/hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> bifunctional purine biosynthesis protein purh; <b>PDBTitle:</b> crystal structure of phosphoribosylaminoimidazolecarboxamide2 formyltransferase / imp cyclohydrolase (tm1249) from thermotoga3 maritima at 1.88 a resolution
47	<a href="#">d2fh1a1</a>	Alignment	not modelled	5.2	17	<b>Fold:</b> Gelsolin-like <b>Superfamily:</b> Actin depolymerizing proteins <b>Family:</b> Gelsolin-like
48	<a href="#">d1kqpa_</a>	Alignment	not modelled	5.2	18	<b>Fold:</b> Adenine nucleotide alpha hydrolase-like <b>Superfamily:</b> Adenine nucleotide alpha hydrolases-like <b>Family:</b> N-type ATP pyrophosphatases
49	<a href="#">d2o3aa1</a>	Alignment	not modelled	5.2	33	<b>Fold:</b> alpha/beta knot <b>Superfamily:</b> alpha/beta knot <b>Family:</b> AF0751-like
50	<a href="#">d1r7ma2</a>	Alignment	not modelled	5.1	24	<b>Fold:</b> Homing endonuclease-like <b>Superfamily:</b> Homing endonucleases <b>Family:</b> Group I mobile intron endonuclease