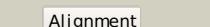
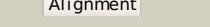
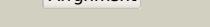
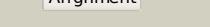
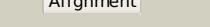
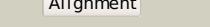


Phyre²

Email	i.a.kelley@imperial.ac.uk
Description	P0AC86
Date	Thu Jan 5 11:17:35 GMT 2012
Unique Job ID	ff0cc1efc3e4ad23

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c3ddsB_			100.0	50	PDB header: transferase Chain: B; PDB Molecule: glycogen phosphorylase, liver form; PDBTitle: crystal structure of glycogen phosphorylase complexed with an2 anthranilimide based inhibitor gsk261
2	d2gj4a1			100.0	50	Fold: UDP-Glycosyltransferase/glycogen phosphorylase Superfamily: UDP-Glycosyltransferase/glycogen phosphorylase Family: Oligosaccharide phosphorylase
3	d2atia1			100.0	51	Fold: UDP-Glycosyltransferase/glycogen phosphorylase Superfamily: UDP-Glycosyltransferase/glycogen phosphorylase Family: Oligosaccharide phosphorylase
4	d1yypa_			100.0	47	Fold: UDP-Glycosyltransferase/glycogen phosphorylase Superfamily: UDP-Glycosyltransferase/glycogen phosphorylase Family: Oligosaccharide phosphorylase
5	c2c4mA_			100.0	42	PDB header: transferase Chain: A; PDB Molecule: glycogen phosphorylase; PDBTitle: starch phosphorylase: structural studies explain oxyanion-2 dependent kinetic stability and regulatory control.
6	d1l5wa_			100.0	46	Fold: UDP-Glycosyltransferase/glycogen phosphorylase Superfamily: UDP-Glycosyltransferase/glycogen phosphorylase Family: Oligosaccharide phosphorylase
7	c3nb0A_			99.4	18	PDB header: transferase Chain: A; PDB Molecule: glycogen [starch] synthase isoform 2; PDBTitle: glucose-6-phosphate activated form of yeast glycogen synthase
8	c3o3cD_			99.3	20	PDB header: transferase Chain: D; PDB Molecule: glycogen [starch] synthase isoform 2; PDBTitle: glycogen synthase basal state udp complex
9	d1rzua_			98.7	16	Fold: UDP-Glycosyltransferase/glycogen phosphorylase Superfamily: UDP-Glycosyltransferase/glycogen phosphorylase Family: Glycosyl transferases group 1
10	c2x6rA_			98.6	19	PDB header: isomerase Chain: A; PDB Molecule: trehalose-synthase tret; PDBTitle: crystal structure of trehalose synthase tret from p.2 horikoshi produced by soaking in trehalose
11	c2xmpB_			98.3	17	PDB header: sugar binding protein Chain: B; PDB Molecule: trehalose-synthase tret; PDBTitle: crystal structure of trehalose synthase tret mutant e326a2 from p.horikoshi in complex with udp

12	c2qzsA			98.3	18	PDB header: transferase Chain: A: PDB Molecule: glycogen synthase; PDBTitle: crystal structure of wild-type e.coli gs in complex with adp2 and glucose(wtgsb)
13	c2r60A			98.0	20	PDB header: transferase Chain: A: PDB Molecule: glycosyl transferase, group 1; PDBTitle: structure of apo sucrose phosphate synthase (sps) of2 haloferomothrix orenii
14	d1uqta			97.9	13	Fold: UDP-Glycosyltransferase/glycogen phosphorylase Superfamily: UDP-Glycosyltransferase/glycogen phosphorylase Family: Trehalose-6-phosphate synthase, OtsA
15	c1uquB			97.9	11	PDB header: synthase Chain: B: PDB Molecule: alpha, alpha-trehalose-phosphate synthase; PDBTitle: trehalose-6-phosphate from e. coli bound with udp-glucose.
16	d2bisA1			97.8	17	Fold: UDP-Glycosyltransferase/glycogen phosphorylase Superfamily: UDP-Glycosyltransferase/glycogen phosphorylase Family: Glycosyl transferases group 1
17	c3oy2A			97.7	16	PDB header: viral protein,transferase Chain: A: PDB Molecule: glycosyltransferase b736I; PDBTitle: crystal structure of a putative glycosyltransferase from paramecium2 bursaria chlorella virus ny2a
18	c3s29C			97.7	17	PDB header: transferase Chain: C: PDB Molecule: sucrose synthase 1; PDBTitle: the crystal structure of sucrose synthase-1 from arabidopsis thaliana2 and its functional implications.
19	c3c4vB			97.5	18	PDB header: transferase Chain: B: PDB Molecule: predicted glycosyltransferases; PDBTitle: structure of the retaining glycosyltransferase msha:the2 first step in mycothiol biosynthesis. organism:3 corynebacterium glutamicum : complex with udp and 1l-ins-1-4 p.
20	c3okaA			97.0	18	PDB header: transferase Chain: A: PDB Molecule: gdp-mannose-dependent alpha-(1-6)-phosphatidylinositol PDBTitle: crystal structure of corynebacterium glutamicum pimb' in complex with2 gdp-man (triclinic crystal form)
21	d2bfwa1		not modelled	96.8	16	Fold: UDP-Glycosyltransferase/glycogen phosphorylase Superfamily: UDP-Glycosyltransferase/glycogen phosphorylase Family: Glycosyl transferases group 1
22	c2gejA		not modelled	96.4	13	PDB header: transferase Chain: A: PDB Molecule: phosphatidylinositol mannosyltransferase (pima); PDBTitle: crystal structure of phosphatidylinositol mannosyltransferase (pima)2 from mycobacterium smegmatis in complex with gdp-man
23	c2jjmH		not modelled	96.4	19	PDB header: transferase Chain: H: PDB Molecule: glycosyl transferase, group 1 family protein; PDBTitle: crystal structure of a family gt4 glycosyltransferase from2 bacillus anthracis orf ba1558.
24	d2f9fa1		not modelled	96.0	15	Fold: UDP-Glycosyltransferase/glycogen phosphorylase Superfamily: UDP-Glycosyltransferase/glycogen phosphorylase Family: Glycosyl transferases group 1
25	d2iw1a1		not modelled	95.3	15	Fold: UDP-Glycosyltransferase/glycogen phosphorylase Superfamily: UDP-Glycosyltransferase/glycogen phosphorylase Family: Glycosyl transferases group 1
26	c2x0dA		not modelled	93.4	11	PDB header: transferase Chain: A: PDB Molecule: wsaf; PDBTitle: apo structure of wsaf
27	c2vsnB		not modelled	93.3	15	PDB header: transferase Chain: B: PDB Molecule: xcogt; PDBTitle: structure and topological arrangement of an o-glcnac2 transferase homolog: insight into molecular control of3 intracellular glycosylation PDB header: isomerase

28	c3ot5D_	Alignment	not modelled	93.2	12	Chain: D: PDB Molecule: udp-n-acetylglucosamine 2-epimerase; PDBTitle: 2.2 angstrom resolution crystal structure of putative udp-n-2 acetylglucosamine 2-epimerase from listeria monocytogenes
29	d1f6da_	Alignment	not modelled	90.5	17	Fold: UDP-Glycosyltransferase/glycogen phosphorylase Superfamily: UDP-Glycosyltransferase/glycogen phosphorylase Family: UDP-N-acetylglucosamine 2-epimerase
30	c3pe3D_	Alignment	not modelled	90.2	18	PDB header: transferase Chain: D: PDB Molecule: udp-n-acetylglucosamine--peptide n- PDBTitle: structure of human o-glcnaC transferase and its complex with a peptide2 substrate
31	c3dzca_	Alignment	not modelled	84.0	11	PDB header: isomerase Chain: A: PDB Molecule: udp-n-acetylglucosamine 2-epimerase; PDBTitle: 2.35 angstrom resolution structure of wecb (vc0917), a udp-n-2 acetylglucosamine 2-epimerase from vibrio cholerae.
32	c3rhzb_	Alignment	not modelled	79.6	13	PDB header: transferase Chain: B: PDB Molecule: nucleotide sugar synthetase-like protein; PDBTitle: structure and functional analysis of a new subfamily of glycosyltransferases required for glycosylation of serine-rich3 streptococcal adhesions
33	c2iv3B_	Alignment	not modelled	62.4	20	PDB header: transferase Chain: B: PDB Molecule: glycosyltransferase; PDBTitle: crystal structure of avigt4, a glycosyltransferase involved2 in avilamycin a biosynthesis
34	c3qhpB_	Alignment	not modelled	61.2	15	PDB header: transferase Chain: B: PDB Molecule: type 1 capsular polysaccharide biosynthesis protein j PDBTitle: crystal structure of the catalytic domain of cholesterol-alpha-2 glucosyltransferase from helicobacter pylori
35	c1yz4A_	Alignment	not modelled	59.2	14	PDB header: hydrolase Chain: A: PDB Molecule: dual specificity phosphatase-like 15 isoform a; PDBTitle: crystal structure of dusp15
36	c2g6zB_	Alignment	not modelled	47.5	22	PDB header: hydrolase Chain: B: PDB Molecule: dual specificity protein phosphatase 5; PDBTitle: crystal structure of human dusp5
37	d1w36c1	Alignment	not modelled	45.6	18	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Tandem AAA-ATPase domain
38	c2z8tX_	Alignment	not modelled	41.3	15	PDB header: hydrolase Chain: X: PDB Molecule: protein-glutaminase; PDBTitle: crystal structure of protein-glutaminase of c. proteolyticum2 strain 9670
39	d1m3ga_	Alignment	not modelled	38.4	16	Fold: (Phosphotyrosine protein) phosphatases II Superfamily: (Phosphotyrosine protein) phosphatases II Family: Dual specificity phosphatase-like
40	c1wrmA_	Alignment	not modelled	37.1	21	PDB header: hydrolase Chain: A: PDB Molecule: dual specificity phosphatase 22; PDBTitle: crystal structure of jsp-1
41	c2e0tA_	Alignment	not modelled	37.0	24	PDB header: hydrolase Chain: A: PDB Molecule: dual specificity phosphatase 26; PDBTitle: crystal structure of catalytic domain of dual specificity phosphatase2 26, ms0830 from homo sapiens
42	d1x99a_	Alignment	not modelled	33.1	44	Fold: Cytolysin/lectin Superfamily: Cytolysin/lectin Family: Fungal fruit body lectin
43	d1y2ta_	Alignment	not modelled	32.6	44	Fold: Cytolysin/lectin Superfamily: Cytolysin/lectin Family: Fungal fruit body lectin
44	c2oudA_	Alignment	not modelled	31.2	20	PDB header: hydrolase Chain: A: PDB Molecule: dual specificity protein phosphatase 10; PDBTitle: crystal structure of the catalytic domain of human mpk5
45	d1vhra_	Alignment	not modelled	30.4	19	Fold: (Phosphotyrosine protein) phosphatases II Superfamily: (Phosphotyrosine protein) phosphatases II Family: Dual specificity phosphatase-like
46	c3rgqA_	Alignment	not modelled	29.2	13	PDB header: hydrolase Chain: A: PDB Molecule: protein-tyrosine phosphatase mitochondrial 1; PDBTitle: crystal structure of ptptm1 in complex with pi(5)p
47	c2npiB_	Alignment	not modelled	27.9	14	PDB header: transcription Chain: B: PDB Molecule: protein clp1; PDBTitle: clp1-atp-pcf11 complex
48	c2ofeA_	Alignment	not modelled	27.8	44	PDB header: sugar binding protein Chain: A: PDB Molecule: sclerotium rolfsii lectin; PDBTitle: the crystal structure of sclerotium rolfsii lectin in complex with n-2 acetyl-d-glucosamine
49	c2wgpA_	Alignment	not modelled	25.8	16	PDB header: hydrolase Chain: A: PDB Molecule: dual specificity protein phosphatase 14; PDBTitle: crystal structure of human dual specificity phosphatase 14
50	c2hcmA_	Alignment	not modelled	25.7	13	PDB header: hydrolase Chain: A: PDB Molecule: dual specificity protein phosphatase; PDBTitle: crystal structure of mouse putative dual specificity phosphatase2 complexed with zinc tungstate, new york structural genomics3 consortium
51	d3etja2	Alignment	not modelled	24.7	38	Fold: PreATP-grasp domain Superfamily: PreATP-grasp domain Family: BC N-terminal domain-like
52	c3se4B_	Alignment	not modelled	24.5	25	PDB header: immune system receptor Chain: B: PDB Molecule: interferon omega-1; PDBTitle: human ifnw-ifnar ternary complex
53	c2y96A_	Alignment	not modelled	22.8	22	PDB header: hydrolase Chain: A: PDB Molecule: dual specificity phosphatase dupd1; PDBTitle: structure of human dual-specificity phosphatase 27
						PDB header: oxygen storage/transport

54	c1yhuA	Alignment	not modelled	22.6	16	Chain: A: PDB Molecule: hemoglobin a1 chain; PDBTitle: crystal structure of riftia pachyptila c1 hemoglobin reveals novel2 assembly of 24 subunits. PDB header: hydrolase
55	c21mgA	Alignment	not modelled	22.5	11	Chain: A: PDB Molecule: dual specificity protein phosphatase 23; PDBTitle: crystal structure of dual specificity protein phosphatase2 23 from homo sapiens in complex with ligand malate ion PDB header: hydrolase
56	c3emuA	Alignment	not modelled	22.0	18	Chain: A: PDB Molecule: leucine rich repeat and phosphatase domain PDBTitle: crystal structure of a leucine rich repeat and phosphatase2 domain containing protein from entamoeba histolytica
57	c2j17A	Alignment	not modelled	21.1	24	PDB header: hydrolase Chain: A: PDB Molecule: tyrosine-protein phosphatase yil113w; PDBTitle: ptyr bound form of sdp-1
58	c3prjB	Alignment	not modelled	21.0	22	PDB header: oxidoreductase Chain: B: PDB Molecule: udp-glucose 6-dehydrogenase; PDBTitle: role of packing defects in the evolution of allostery and induced fit2 in human udp-glucose dehydrogenase.
59	d1m1nb	Alignment	not modelled	20.9	19	Fold: Chelatase-like Superfamily: "Helical backbone" metal receptor Family: Nitrogenase iron-molybdenum protein
60	c2nt2C	Alignment	not modelled	20.8	18	PDB header: hydrolase Chain: C: PDB Molecule: protein phosphatase slingshot homolog 2; PDBTitle: crystal structure of slingshot phosphatase 2
61	c3piwA	Alignment	not modelled	19.5	24	PDB header: cytokine Chain: A: PDB Molecule: type i interferon 2; PDBTitle: zebrafish interferon 2
62	d1u3dal	Alignment	not modelled	19.4	26	Fold: Cytochrome/photolyase FAD-binding domain Superfamily: Cytochrome/photolyase FAD-binding domain Family: Cytochrome/photolyase FAD-binding domain
63	d1mv8a1	Alignment	not modelled	19.4	17	Fold: 6-phosphogluconate dehydrogenase C-terminal domain-like Superfamily: 6-phosphogluconate dehydrogenase C-terminal domain-like Family: UDP-glucose/GDP-mannose dehydrogenase dimerisation domain
64	d1dlja1	Alignment	not modelled	19.1	28	Fold: 6-phosphogluconate dehydrogenase C-terminal domain-like Superfamily: 6-phosphogluconate dehydrogenase C-terminal domain-like Family: UDP-glucose/GDP-mannose dehydrogenase dimerisation domain
65	c2gwoC	Alignment	not modelled	19.0	13	PDB header: hydrolase Chain: C: PDB Molecule: dual specificity protein phosphatase 13; PDBTitle: crystal structure of tmnpd
66	c3bdkB	Alignment	not modelled	18.8	17	PDB header: lyase Chain: B: PDB Molecule: d-mannonate dehydratase; PDBTitle: crystal structure of streptococcus suis mannonate2 dehydratase complexed with substrate analogue
67	d1v3aa	Alignment	not modelled	18.8	27	Fold: (Phosphotyrosine protein) phosphatases II Superfamily: (Phosphotyrosine protein) phosphatases II Family: Dual specificity phosphatase-like
68	c3pn1A	Alignment	not modelled	18.5	19	PDB header: ligase/ligase inhibitor Chain: A: PDB Molecule: dna ligase; PDBTitle: novel bacterial nad+-dependent dna ligase inhibitors with broad2 spectrum potency and antibacterial efficacy in vivo
69	d1v9pa3	Alignment	not modelled	18.0	13	Fold: ATP-grasp Superfamily: DNA ligase/mRNA capping enzyme, catalytic domain Family: Adenylation domain of NAD+-dependent DNA ligase
70	c2a6aB	Alignment	not modelled	17.7	16	PDB header: hydrolase Chain: B: PDB Molecule: hypothetical protein tm0874; PDBTitle: crystal structure of glycoprotein endopeptidase (tm0874) from thermotoga maritima at 2.50 a resolution
71	c2r0bA	Alignment	not modelled	17.6	22	PDB header: hydrolase Chain: A: PDB Molecule: serine/threonine/tyrosine-interacting protein; PDBTitle: crystal structure of human tyrosine phosphatase-like2 serine/threonine/tyrosine-interacting protein
72	d2f8la1	Alignment	not modelled	17.4	20	Fold: S-adenosyl-L-methionine-dependent methyltransferases Superfamily: S-adenosyl-L-methionine-dependent methyltransferases Family: N-6 DNA Methylase-like
73	d1o58a	Alignment	not modelled	17.1	16	Fold: Tryptophan synthase beta subunit-like PLP-dependent enzymes Superfamily: Tryptophan synthase beta subunit-like PLP-dependent enzymes Family: Tryptophan synthase beta subunit-like PLP-dependent enzymes
74	d1ta8a	Alignment	not modelled	16.9	26	Fold: ATP-grasp Superfamily: DNA ligase/mRNA capping enzyme, catalytic domain Family: Adenylation domain of NAD+-dependent DNA ligase
75	d3buxb2	Alignment	not modelled	16.6	20	Fold: N-cbl like Superfamily: N-terminal domain of cbl (N-cbl) Family: N-terminal domain of cbl (N-cbl)
76	d1b5la	Alignment	not modelled	15.4	24	Fold: 4-helical cytokines Superfamily: 4-helical cytokines Family: Interferons/interleukin-10 (IL-10)
77	d1v4va	Alignment	not modelled	15.2	14	Fold: UDP-Glycosyltransferase/glycogen phosphorylase Superfamily: UDP-Glycosyltransferase/glycogen phosphorylase Family: UDP-N-acetylglucosamine 2-epimerase
78	d1r30a	Alignment	not modelled	15.0	14	Fold: TIM beta/alpha-barrel Superfamily: Radical SAM enzymes Family: Biotin synthase
						PDB header: transferase

79	c1r30A_		Alignment	not modelled	15.0	14	Chain: A: PDB Molecule: biotin synthase; PDBTitle: the crystal structure of biotin synthase, an s-2 adenosylmethionine-dependent radical enzyme PDB header: ligase
80	c3bacA_		Alignment	not modelled	14.7	19	Chain: A: PDB Molecule: dna ligase; PDBTitle: structural basis for the inhibition of bacterial nad+2 dependent dna ligase
81	c2y0dB_		Alignment	not modelled	14.5	13	PDB header: oxidoreductase Chain: B: PDB Molecule: udp-glucose dehydrogenase; PDBTitle: bcec mutation y10k
82	c2k29A_		Alignment	not modelled	14.2	27	PDB header: transcription Chain: A: PDB Molecule: antitoxin relb; PDBTitle: structure of the dbd domain of e. coli antitoxin relb
83	c1eysC_		Alignment	not modelled	13.8	18	PDB header: electron transport Chain: C: PDB Molecule: photosynthetic reaction center; PDBTitle: crystal structure of photosynthetic reaction center from a2 thermophilic bacterium, thermochromatium tepidum
84	d1eysc_		Alignment	not modelled	13.8	18	Fold: Multiheme cytochromes Superfamily: Multiheme cytochromes Family: Photosynthetic reaction centre (cytochrome subunit)
85	d1mkpa_		Alignment	not modelled	13.5	13	Fold: (Phosphotyrosine protein) phosphatases II Superfamily: (Phosphotyrosine protein) phosphatases II Family: Dual specificity phosphatase-like
86	c3f4yF_		Alignment	not modelled	13.4	64	PDB header: viral protein Chain: F: PDB Molecule: mutant peptide derived from hiv gp41 chr domain; PDBTitle: hiv gp41 six-helix bundle containing a mutant chr alpha-2 peptide sequence
87	c2o3jC_		Alignment	not modelled	13.3	19	PDB header: oxidoreductase Chain: C: PDB Molecule: udp-glucose 6-dehydrogenase; PDBTitle: structure of caenorhabditis elegans udp-glucose dehydrogenase
88	d1ohea2		Alignment	not modelled	12.9	13	Fold: (Phosphotyrosine protein) phosphatases II Superfamily: (Phosphotyrosine protein) phosphatases II Family: Dual specificity phosphatase-like
89	c2esbA_		Alignment	not modelled	12.7	16	PDB header: hydrolase Chain: A: PDB Molecule: dual specificity protein phosphatase 18; PDBTitle: crystal structure of human dusp18
90	c3rz2B_		Alignment	not modelled	12.6	28	PDB header: hydrolase Chain: B: PDB Molecule: protein tyrosine phosphatase type iva 1; PDBTitle: crystal of prl-1 complexed with peptide
91	d1aula_		Alignment	not modelled	12.6	10	Fold: 4-helical cytokines Superfamily: 4-helical cytokines Family: Interferons/interleukin-10 (IL-10)
92	d1qkia1		Alignment	not modelled	12.6	15	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Glyceraldehyde-3-phosphate dehydrogenase-like, N-terminal domain
93	d1rh2a_		Alignment	not modelled	12.6	29	Fold: 4-helical cytokines Superfamily: 4-helical cytokines Family: Interferons/interleukin-10 (IL-10)
94	c3r6mD_		Alignment	not modelled	12.5	25	PDB header: hydrolase Chain: D: PDB Molecule: yeaz, resuscitation promoting factor; PDBTitle: crystal structure of vibrio parahaemolyticus yeaz
95	c3cvyA_		Alignment	not modelled	12.3	23	PDB header: lyase/dna Chain: A: PDB Molecule: re11660p; PDBTitle: drosophila melanogaster (6-4) photolyase bound to repaired2 ds dna
96	d1di1a_		Alignment	not modelled	12.3	13	Fold: Terpenoid synthases Superfamily: Terpenoid synthases Family: Aristolochene/pentalenene synthase
97	c1fbvA_		Alignment	not modelled	12.2	20	PDB header: ligase Chain: A: PDB Molecule: signal transduction protein cbl; PDBTitle: structure of a cbl-ubch7 complex: ring domain function in2 ubiquitin-protein ligases
98	d1i9sa_		Alignment	not modelled	12.1	14	Fold: (Phosphotyrosine protein) phosphatases II Superfamily: (Phosphotyrosine protein) phosphatases II Family: Dual specificity phosphatase-like
99	d1wu3i_		Alignment	not modelled	12.1	10	Fold: 4-helical cytokines Superfamily: 4-helical cytokines Family: Interferons/interleukin-10 (IL-10)