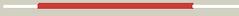
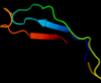
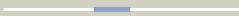
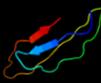
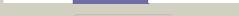
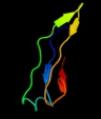
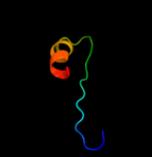
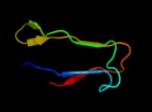


Phyre2

Email	I.a.kelley@imperial.ac.uk
Description	Q9S4X4
Date	Thu Jan 5 12:38:28 GMT 2012
Unique Job ID	c2d33ad333e20853

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d2ijra1	 Alignment		100.0	34	Fold: Api92-like Superfamily: Api92-like Family: Api92-like
2	d1ypzf2	 Alignment		30.7	15	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
3	c1v98A_	 Alignment		28.8	42	PDB header: oxidoreductase Chain: A: PDB Molecule: thioredoxin; PDBTitle: crystal structure analysis of thioredoxin from thermophilus
4	d1pskh2	 Alignment		27.5	17	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
5	c2jv4A_	 Alignment		25.1	23	PDB header: isomerase Chain: A: PDB Molecule: peptidyl-prolyl cis/trans isomerase; PDBTitle: structure characterisation of pina ww domain and comparison2 with other group iv ww domains, pin1 and ess1
6	c3it8E_	 Alignment		24.6	24	PDB header: immune system Chain: E: PDB Molecule: 2l protein; PDBTitle: crystal structure of tnf alpha complexed with a poxvirus mhc-related2 tnf binding protein
7	d1es0b1	 Alignment		21.6	20	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
8	c1xbsA_	 Alignment		21.6	14	PDB header: transcription, cell cycle Chain: A: PDB Molecule: dim1-like protein; PDBTitle: crystal structure of human dim2: a dim1-like protein
9	d1clzh2	 Alignment		19.9	11	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
10	d1mh5h2	 Alignment		19.6	11	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
11	c3fonD_	 Alignment		19.0	15	PDB header: immune system Chain: D: PDB Molecule: beta-2-microglobulin; PDBTitle: crystal structure of the class i mhc molecule h-2kwm7 with a single2 self peptide vndifeai

12	d2ifqa1	Alignment		18.9	30	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Thioltransferase
13	d2fath2	Alignment		18.7	15	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
14	c1s9vA_	Alignment		18.3	18	PDB header: immune system Chain: A: PDB Molecule: hla class ii histocompatibility antigen, dq(3) PDBTitle: crystal structure of hla-dq2 complexed with deamidated2 gliadin peptide
15	c3fomB_	Alignment		18.0	15	PDB header: immune system Chain: B: PDB Molecule: beta-2-microglobulin; PDBTitle: crystal structure of the class i mhc molecule h-2kwm7 with a single2 self peptide iqqsierl
16	d1xwaa_	Alignment		17.9	27	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Thioltransferase
17	d1u58a1	Alignment		17.7	13	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
18	d1hxmb2	Alignment		17.3	22	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
19	c2vm2C_	Alignment		17.2	27	PDB header: oxidoreductase Chain: C: PDB Molecule: thioredoxin h isoform 1.; PDBTitle: crystal structure of barley thioredoxin h isoform 12 crystallized using peg as precipitant
20	c1tnol_	Alignment		16.8	23	PDB header: transferase Chain: I: PDB Molecule: geranylgeranyltransferase type i alpha subunit; PDBTitle: rat protein geranylgeranyltransferase type-i complexed with2 a ggpp analog and a kkskstkcvim peptide derived from k-3 ras4b
21	c3ardB_	Alignment	not modelled	16.4	24	PDB header: immune system Chain: B: PDB Molecule: beta-2-microglobulin; PDBTitle: ternary crystal structure of the mouse nkt tcr-cd1d-3'deoxy-alpha-2 galactosylceramide
22	c3areB_	Alignment	not modelled	16.4	24	PDB header: immune system Chain: B: PDB Molecule: beta-2-microglobulin; PDBTitle: ternary crystal structure of the mouse nkt tcr-cd1d-4'deoxy-alpha-2 galactosylceramide
23	c3tcoA_	Alignment	not modelled	16.1	23	PDB header: oxidoreductase Chain: A: PDB Molecule: thioredoxin (trxa-1); PDBTitle: crystallographic and spectroscopic characterization of sulfobobus2 solfataricus trxa1 provide insights into the determinants of3 thioredoxin fold stability
24	d1qgva_	Alignment	not modelled	16.0	21	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: spliceosomal protein U5-15Kd
25	d1ep7a_	Alignment	not modelled	15.8	32	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Thioltransferase
26	d1l0ba2	Alignment	not modelled	15.6	20	Fold: BRCT domain Superfamily: BRCT domain Family: BRCT domain
27	c3cxgA_	Alignment	not modelled	15.5	18	PDB header: oxidoreductase Chain: A: PDB Molecule: putative thioredoxin; PDBTitle: crystal structure of plasmodium falci parum thioredoxin, pfi0790w
28	d1i5ga_	Alignment	not modelled	15.5	16	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like

29	c3na4A	Alignment	not modelled	15.2	19	PDB header: immune system Chain: A: PDB Molecule: beta-2-microglobulin; PDBTitle: d53p beta-2 microglobulin mutant
30	d1iqdb2	Alignment	not modelled	15.1	18	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
31	c2I5IA	Alignment	not modelled	15.1	28	PDB header: transport protein Chain: A: PDB Molecule: thioredoxin; PDBTitle: solution structure of thioredoxin from bacteroides vulgatus
32	d1o8xa	Alignment	not modelled	14.9	21	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
33	c3ilqD	Alignment	not modelled	14.9	15	PDB header: immune system Chain: D: PDB Molecule: beta-2 microglobulin; PDBTitle: structure of mcd1d with bound glycolipid bbgl-2c from2 borrelia burgdorferi
34	c2dbcA	Alignment	not modelled	14.8	14	PDB header: signaling protein Chain: A: PDB Molecule: unnamed protein product; PDBTitle: solution structure of the thioredoxin-like domain of2 phosducin-like protein 2(pdcl2)
35	c2f51B	Alignment	not modelled	14.6	32	PDB header: electron transport Chain: B: PDB Molecule: thioredoxin; PDBTitle: structure of trichomonas vaginalis thioredoxin
36	d1fnga1	Alignment	not modelled	14.5	13	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
37	d1ogae2	Alignment	not modelled	14.3	22	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
38	c3o9wB	Alignment	not modelled	14.1	15	PDB header: immune system Chain: B: PDB Molecule: beta-2 microglobulin; PDBTitle: recognition of a glycolipid antigen by the inkt cell tcr
39	d1thxa	Alignment	not modelled	13.9	25	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Thioltransferase
40	c2dj0A	Alignment	not modelled	13.8	11	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: thioredoxin-related transmembrane protein 2; PDBTitle: the solution structure of the thioredoxin domain of human2 thioredoxin-related transmembrane protein 2
41	d2trxa	Alignment	not modelled	13.6	33	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Thioltransferase
42	d1ro0a	Alignment	not modelled	13.6	20	Fold: Prim-pol domain Superfamily: Prim-pol domain Family: Bifunctional DNA primase/polymerase N-terminal domain
43	c3gblA	Alignment	not modelled	13.5	40	PDB header: immune system Chain: A: PDB Molecule: beta-2-microglobulin; PDBTitle: crystal structure of grass carp beta2-microglobulin
44	c3pqyG	Alignment	not modelled	13.4	24	PDB header: immune system Chain: G: PDB Molecule: beta-2-microglobulin; PDBTitle: crystal structure of 6218 tcr in complex with the h2db-pa224
45	c3pqyB	Alignment	not modelled	13.4	24	PDB header: immune system Chain: B: PDB Molecule: beta-2-microglobulin; PDBTitle: crystal structure of 6218 tcr in complex with the h2db-pa224
46	d1gh2a	Alignment	not modelled	13.3	23	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Thioltransferase
47	c3ul3A	Alignment	not modelled	13.3	23	PDB header: oxidoreductase Chain: A: PDB Molecule: thioredoxin; PDBTitle: structural insights into thioredoxin-2: a component of malaria2 parasite protein secretion machinery
48	d1i4fa1	Alignment	not modelled	13.2	15	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
49	d1fo5a	Alignment	not modelled	12.9	18	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Thioltransferase
50	c2j23A	Alignment	not modelled	12.7	30	PDB header: immune protein Chain: A: PDB Molecule: thioredoxin; PDBTitle: cross-reactivity and crystal structure of malassezia2 sympodialis thioredoxin (mala s 13), a member of a new pan-3 allergen family
51	c2x89G	Alignment	not modelled	12.6	22	PDB header: immune system Chain: G: PDB Molecule: beta-2-microglobulin; PDBTitle: structure of the beta2_microglobulin involved in2 amyloidogenesis
52	d1c1eh2	Alignment	not modelled	12.5	30	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
53	c2q6wD	Alignment	not modelled	12.4	17	PDB header: immune system Chain: D: PDB Molecule: hla class ii histocompatibility antigen, dr PDBTitle: the structure of hla-dra, drb3*0101 (dr52a) with bound2 platelet integrin peptide associated with fetal and3 neonatal alloimmune thrombocytopenia
54	c2v1vA	Alignment	not modelled	12.4	27	PDB header: oxidoreductase Chain: A: PDB Molecule: thioredoxin h isoform 2.; PDBTitle: crystal structure of barley thioredoxin h isoform 2 in2 partially radiation-reduced state PDB header: oxidoreductase

55	c2i9hA_	Alignment	not modelled	12.3	27	Chain: A: PDB Molecule: thioredoxin i; PDBTitle: nmr solution structure of the reduced form of thioredoxin 12 from yeast (trx1)
56	d1xfla_	Alignment	not modelled	11.7	27	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Thioltransferase
57	c1d9kD_	Alignment	not modelled	11.4	18	PDB header: immune system Chain: D: PDB Molecule: mhc i-ak b chain (beta chain); PDBTitle: crystal structure of complex between d10 tcr and pmhc i-ak/ca
58	d1dn0b2	Alignment	not modelled	11.3	13	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
59	c2bc4C_	Alignment	not modelled	11.2	50	PDB header: immune system Chain: C: PDB Molecule: hla class ii histocompatibility antigen, dm PDBTitle: crystal structure of hla-dm
60	d2nnab1	Alignment	not modelled	11.2	33	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
61	d2fwha1	Alignment	not modelled	11.2	25	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Thioltransferase
62	d1bfob2	Alignment	not modelled	11.2	30	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
63	d1teth2	Alignment	not modelled	11.0	30	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
64	d2fbjh2	Alignment	not modelled	10.9	22	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
65	c2albA_	Alignment	not modelled	10.8	23	PDB header: isomerase Chain: A: PDB Molecule: protein disulfide-isomerase a3; PDBTitle: nmr structure of the n-terminal domain a of the2 glycoprotein chaperone erp57
66	c2e0qA_	Alignment	not modelled	10.8	25	PDB header: electron transport Chain: A: PDB Molecule: thioredoxin; PDBTitle: crystal structure of k53e thioredoxin from sulfobolus2 tokodaii strain7
67	d1s9va1	Alignment	not modelled	10.8	30	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
68	c1p4lB_	Alignment	not modelled	10.7	15	PDB header: immune system Chain: B: PDB Molecule: beta-2-microglobulin; PDBTitle: crystal structure of nk receptor ly49c mutant with its mhc2 class i ligand h-2kb
69	d1je6a1	Alignment	not modelled	10.6	17	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
70	c3d22A_	Alignment	not modelled	10.6	18	PDB header: oxidoreductase Chain: A: PDB Molecule: thioredoxin h-type; PDBTitle: crystal structure of a poplar thioredoxin h mutant, 2 ptrxh4c61s
71	d1hyrc1	Alignment	not modelled	10.5	50	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
72	c2qc7A_	Alignment	not modelled	10.5	29	PDB header: chaperone Chain: A: PDB Molecule: endoplasmic reticulum protein erp29; PDBTitle: crystal structure of the protein-disulfide isomerase related chaperone2 erp29
73	c2fgxA_	Alignment	not modelled	10.4	25	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: putative thioredoxin; PDBTitle: solution nmr structure of protein ne2328 from nitrosomonas2 europaea. northeast structural genomics consortium target3 net3.
74	d1k8ib1	Alignment	not modelled	10.4	20	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
75	d1kjvb_	Alignment	not modelled	10.4	13	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
76	c3e6fB_	Alignment	not modelled	10.4	15	PDB header: immune system Chain: B: PDB Molecule: beta-2 microglobulin; PDBTitle: mhc class i h-2dd heavy chain complexed with beta-22 microglobulin and a variant peptide, pa9, from the human3 immunodeficiency virus (bal) envelope glycoprotein 120
77	c2xbqB_	Alignment	not modelled	10.4	27	PDB header: oxidoreductase Chain: B: PDB Molecule: thioredoxin; PDBTitle: crystal structure of reduced schistosoma mansoni2 thioredoxin pre-protein at 1.7 angstrom
78	c3hypB_	Alignment	not modelled	10.3	25	PDB header: electron transport Chain: B: PDB Molecule: thioredoxin; PDBTitle: crystal structure of bacteroides fragilis trxp_s105g mutant
79	d1lk3h2	Alignment	not modelled	10.3	30	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
80	d1kcuh2	Alignment	not modelled	10.2	30	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
81	d1fe8h2	Alignment	not modelled	10.2	22	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin

						Family: C1 set domains (antibody constant domain-like)
82	d1uvqb1	Alignment	not modelled	10.1	30	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
83	d1c12b2	Alignment	not modelled	10.1	30	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
84	c1k8iB	Alignment	not modelled	10.1	22	PDB header: immune system Chain: B: PDB Molecule: mhc class ii h2-m beta 2 chain; PDBTitle: crystal structure of mouse h2-dm
85	c3p2aB	Alignment	not modelled	10.0	27	PDB header: oxidoreductase Chain: B: PDB Molecule: putative thioredoxin-like protein; PDBTitle: crystal structure of thioredoxin 2 from yersinia pestis
86	c2pptA	Alignment	not modelled	10.0	30	PDB header: oxidoreductase Chain: A: PDB Molecule: thioredoxin-2; PDBTitle: crystal structure of thioredoxin-2
87	d1sm3h2	Alignment	not modelled	10.0	22	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
88	d2k4xa1	Alignment	not modelled	10.0	18	Fold: Rubredoxin-like Superfamily: Zn-binding ribosomal proteins Family: Ribosomal protein S27a
89	d1f9ma	Alignment	not modelled	10.0	26	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Thioltransferase
90	d1m7ta	Alignment	not modelled	9.9	27	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Thioltransferase
91	d2h26a1	Alignment	not modelled	9.9	33	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
92	d1muja1	Alignment	not modelled	9.9	30	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
93	c3mrkB	Alignment	not modelled	9.9	20	PDB header: immune system Chain: B: PDB Molecule: beta-2-microglobulin; PDBTitle: crystal structure of mhc class i hla-a2 molecule complexed with afp1372 nonapeptide
94	d1u8ib2	Alignment	not modelled	9.9	22	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
95	d1wbxa1	Alignment	not modelled	9.8	15	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
96	c1f3jD	Alignment	not modelled	9.8	13	PDB header: immune system Chain: D: PDB Molecule: h-2 class ii histocompatibility antigen; PDBTitle: histocompatibility antigen i-ag7
97	d1de4a1	Alignment	not modelled	9.8	40	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
98	c2xpgB	Alignment	not modelled	9.8	22	PDB header: immune system Chain: B: PDB Molecule: beta-2-microglobulin; PDBTitle: crystal structure of a mhc class i-peptide complex
99	c2vocA	Alignment	not modelled	9.8	35	PDB header: electron transport Chain: A: PDB Molecule: thioredoxin; PDBTitle: thioredoxin a active site mutants form mixed disulfide2 dimers that resemble enzyme-substrate reaction3 intermediate