




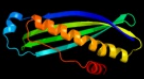

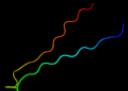

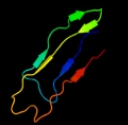



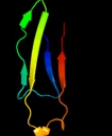








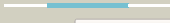
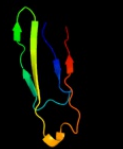
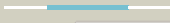
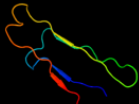









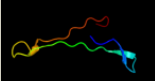

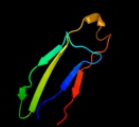

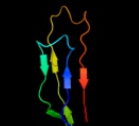


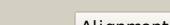




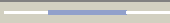



Phyre2

Email	I.a.kelley@imperial.ac.uk
Description	P0AG86
Date	Thu Jan 5 11:28:26 GMT 2012
Unique Job ID	8ac4c68a75194331

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	dlozbg_	 Alignment		100.0	55	Fold: SecB-like Superfamily: SecB-like Family: Bacterial protein-export protein SecB
2	dlozba_	 Alignment		100.0	57	Fold: SecB-like Superfamily: SecB-like Family: Bacterial protein-export protein SecB
3	dlqyna_	 Alignment		100.0	100	Fold: SecB-like Superfamily: SecB-like Family: Bacterial protein-export protein SecB
4	dlogae2	 Alignment		48.0	31	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
5	dism3h2	 Alignment		46.8	22	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
6	d1clzh2	 Alignment		42.5	24	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
7	d1t66d2	 Alignment		41.6	20	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
8	d1kcrh2	 Alignment		39.0	20	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
9	d1mexh2	 Alignment		36.6	22	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
10	d1h0db2	 Alignment		35.7	22	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
11	d1fe8h2	 Alignment		34.7	24	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)

12	d1mjuh2	 Alignment		33.2	24	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
13	d1orqb2	 Alignment		31.6	22	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
14	d2ccva1	 Alignment		30.5	16	Fold: HPA-like Superfamily: Agglutinin HPA-like Family: Agglutinin HPA-like
15	d1pz5b2	 Alignment		30.2	29	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
16	d1q0yh2	 Alignment		29.8	27	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
17	d1q0xh2	 Alignment		29.8	27	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
18	c3ilqD_	 Alignment		29.3	16	PDB header: immune system Chain: D: PDB Molecule: beta-2 microglobulin; PDBTitle: structure of mcd1d with bound glycolipid bbgl-2c from2 borrelia burgdorferi
19	d1c1eh2	 Alignment		29.2	22	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
20	d1kcuh2	 Alignment		29.2	22	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
21	d1kcvh2	 Alignment	not modelled	29.2	19	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
22	d1wejh2	 Alignment	not modelled	28.8	22	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
23	d2jelh2	 Alignment	not modelled	28.4	25	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
24	d1c5ch2	 Alignment	not modelled	28.2	19	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
25	d1ilca1	 Alignment	not modelled	27.5	18	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
26	d1nfd2	 Alignment	not modelled	25.5	26	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
27	d1kfah2	 Alignment	not modelled	25.2	23	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
28	d1fh5h2	 Alignment	not modelled	25.0	25	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
29	c3quzB_	 Alignment	not modelled	24.8	16	PDB header: immune system Chain: B: PDB Molecule: beta-2 microglobulin; PDBTitle: structure of the mouse cd1d-nu-alpha-galcer-inkt tcr

					complex
30	c3ta3B_	Alignment	not modelled	24.8	16 PDB header: immune system Chain: B: PDB Molecule: beta-2-microglobulin; PDBTitle: structure of the mouse cd1d-glc-dag-s2-inkt tcr complex
31	c3quxB_	Alignment	not modelled	24.2	15 PDB header: immune system Chain: B: PDB Molecule: beta-2 microglobulin; PDBTitle: structure of the mouse cd1d-alpha-c-galcer-inkt tcr complex
32	d1a6tb2	Alignment	not modelled	24.1	22 Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
33	c3ubxE_	Alignment	not modelled	24.1	13 PDB header: immune system Chain: E: PDB Molecule: beta-2-microglobulin; PDBTitle: crystal structure of the mouse cd1d-c20:2-agalcer-I363 mab fab complex
34	c3quyB_	Alignment	not modelled	24.1	13 PDB header: immune system Chain: B: PDB Molecule: beta-2 microglobulin; PDBTitle: structure of the mouse cd1d-bnnh-gsl-1'-inkt tcr complex
35	c3rugD_	Alignment	not modelled	24.1	13 PDB header: immune system Chain: D: PDB Molecule: beta-2 microglobulin; PDBTitle: crystal structure of valpha10-vbeta8.1 nkt tcr in complex with cd1d-2 alphaglusylceramide (c20:2)
36	c3rzcB_	Alignment	not modelled	24.1	13 PDB header: immune system Chain: B: PDB Molecule: beta-2-microglobulin; PDBTitle: structure of the self-antigen igb3 bound to mouse cd1d and in complex2 with the inkt tcr
37	c3to4B_	Alignment	not modelled	24.1	13 PDB header: immune system Chain: B: PDB Molecule: beta-2 microglobulin; PDBTitle: structure of mouse valpha14vbeta2-mousecd1d-alpha-galactosylceramide
38	c3ma7D_	Alignment	not modelled	24.1	13 PDB header: immune system Chain: D: PDB Molecule: beta-2 microglobulin; PDBTitle: crystal structure of cardiolipin bound to mouse cd1d
39	c3arbB_	Alignment	not modelled	24.1	13 PDB header: immune system Chain: B: PDB Molecule: beta-2-microglobulin; PDBTitle: ternary crystal structure of the nkt tcr-cd1d-alpha-galactosylceramide2 analogue-och
40	c3argB_	Alignment	not modelled	24.1	13 PDB header: immune system Chain: B: PDB Molecule: beta-2-microglobulin; PDBTitle: ternary crystal structure of the mouse nkt tcr-cd1d-alpha-2 glucosylceramide(c20:2)
41	c3ma7B_	Alignment	not modelled	24.1	13 PDB header: immune system Chain: B: PDB Molecule: beta-2 microglobulin; PDBTitle: crystal structure of cardiolipin bound to mouse cd1d
42	c1z5lD_	Alignment	not modelled	24.1	13 PDB header: immune system Chain: D: PDB Molecule: beta-2-microglobulin; PDBTitle: structure of a highly potent short-chain galactosyl ceramide agonist2 bound to cd1d
43	c3rugB_	Alignment	not modelled	24.1	13 PDB header: immune system Chain: B: PDB Molecule: beta-2 microglobulin; PDBTitle: crystal structure of valpha10-vbeta8.1 nkt tcr in complex with cd1d-2 alphaglusylceramide (c20:2)
44	c1z5lB_	Alignment	not modelled	24.1	13 PDB header: immune system Chain: B: PDB Molecule: beta-2-microglobulin; PDBTitle: structure of a highly potent short-chain galactosyl ceramide agonist2 bound to cd1d
45	c3tn0B_	Alignment	not modelled	24.1	13 PDB header: immune system Chain: B: PDB Molecule: beta-2 microglobulin; PDBTitle: structure of mouse va14vb8.2nkt tcr-mouse cd1d-a-c-galactosylceramide2 complex
46	d2g60h1	Alignment	not modelled	24.0	24 Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
47	d1q72h2	Alignment	not modelled	23.7	27 Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
48	c3na4A_	Alignment	not modelled	23.5	17 PDB header: immune system Chain: A: PDB Molecule: beta-2-microglobulin; PDBTitle: d53p beta-2 microglobulin mutant
49	d1qqda1	Alignment	not modelled	22.7	19 Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
50	d2fath2	Alignment	not modelled	22.7	26 Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
51	d1neza1	Alignment	not modelled	22.4	20 Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
52	d1dn0b2	Alignment	not modelled	22.3	16 Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
53	d2fika1	Alignment	not modelled	22.2	20 Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
54	d1pskh2	Alignment	not modelled	22.1	29 Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
55	d2h26a1	Alignment	not modelled	22.1	13 Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
56	c3argB_	Alignment	not modelled	22.0	16 PDB header: immune system Chain: B: PDB Molecule: beta-2-microglobulin;

56	c3ardB_	Alignment	not modelled	22.0	10	PDBTitle: ternary crystal structure of the mouse nkt tcr-cd1d-4' deoxy-alpha-2 galactosylceramide PDB header: immune system
57	c3ardB_	Alignment	not modelled	22.0	16	Chain: B: PDB Molecule: beta-2-microglobulin; PDBTitle: ternary crystal structure of the mouse nkt tcr-cd1d-3' deoxy-alpha-2 galactosylceramide
58	d1a3rh2	Alignment	not modelled	21.8	25	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
59	d1teth2	Alignment	not modelled	21.5	26	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
60	d1nldh2	Alignment	not modelled	21.5	24	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
61	d1mcoh2	Alignment	not modelled	21.3	18	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
62	d1vgka1	Alignment	not modelled	21.2	17	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
63	c3fonA_	Alignment	not modelled	20.8	20	PDB header: immune system Chain: A: PDB Molecule: mhc; PDBTitle: crystal structure of the class i mhc molecule h-2kwm7 with a single2 self peptide vndifeai
64	d1qo3a1	Alignment	not modelled	20.6	17	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
65	d1nyed_	Alignment	not modelled	20.6	12	Fold: OsmC-like Superfamily: OsmC-like Family: Ohr/OsmC resistance proteins
66	c2q6wD_	Alignment	not modelled	20.5	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
67	d1pg7x2	Alignment	not modelled	20.4	29	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
68	c1p1za_	Alignment	not modelled	20.2	20	PDB header: immune system Chain: A: PDB Molecule: h-2 class i histocompatibility antigen, k-b PDBTitle: x-ray crystal structure of the lectin-like natural killer2 cell receptor ly-49c bound to its mhc class i ligand h-2kb
69	d1k8ia1	Alignment	not modelled	20.1	14	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
70	d1je6a1	Alignment	not modelled	20.1	13	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
71	d1hyrc1	Alignment	not modelled	20.1	13	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
72	d1lk3h2	Alignment	not modelled	19.9	21	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
73	c3pqyB_	Alignment	not modelled	19.3	16	PDB header: immune system Chain: B: PDB Molecule: beta-2-microglobulin; PDBTitle: crystal structure of 6218 tcr in complex with the h2db-pa224
74	c3pqyG_	Alignment	not modelled	19.3	16	PDB header: immune system Chain: G: PDB Molecule: beta-2-microglobulin; PDBTitle: crystal structure of 6218 tcr in complex with the h2db-pa224
75	c3g08B_	Alignment	not modelled	19.1	11	PDB header: immune system Chain: B: PDB Molecule: beta-2 microglobulin; PDBTitle: crystal structure of the alpha-galactosylceramide analog och in2 complex with mouse cd1d
76	c2fikB_	Alignment	not modelled	19.1	11	PDB header: immune system Chain: B: PDB Molecule: b(2)-microglobulin; PDBTitle: structure of a microbial glycosphingolipid bound to mouse cd1d
77	c1je6A_	Alignment	not modelled	19.0	13	PDB header: immune system Chain: A: PDB Molecule: mhc class i chain-related protein; PDBTitle: structure of the mhc class i homolog micb
78	d1osph2	Alignment	not modelled	19.0	21	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
79	d1kja1	Alignment	not modelled	18.8	20	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
80	c3mroB_	Alignment	not modelled	18.7	17	PDB header: immune system Chain: B: PDB Molecule: beta-2-microglobulin; PDBTitle: crystal structure of mhc class i hla-a2 molecule complexed with melan-2 a mart1 decapeptide variant
81	c3mrqB_	Alignment	not modelled	18.7	17	PDB header: immune system Chain: B: PDB Molecule: beta-2-microglobulin; PDBTitle: crystal structure of mhc class i hla-a2 molecule complexed with melan-2 a mart1 decapeptide variant
82	c3qeqB_	Alignment	not modelled	18.7	17	PDB header: immune system Chain: B: PDB Molecule: beta-2-microglobulin; PDBTitle: the complex between tcr dmf4 and human class i mhc hla-a2 with the2 bound mart-1(27-35) nonameric peptide

83	c3oxsB_	Alignment	not modelled	18.7	17	PDB header: immune system Chain: B: PDB Molecule: beta-2-microglobulin; PDBTitle: crystal structure of hla a*02:07 bound to hbv core 18-27
84	c3ox8B_	Alignment	not modelled	18.7	17	PDB header: immune system Chain: B: PDB Molecule: beta-2-microglobulin; PDBTitle: crystal structure of hla a*02:03 bound to hbv core 18-27
85	c3mriB_	Alignment	not modelled	18.7	17	PDB header: immune system Chain: B: PDB Molecule: beta-2-microglobulin; PDBTitle: crystal structure of mhc class i hla-a2 molecule complexed with hcv2 ns3-1073-1081 nonapeptide g4m-v5w variant
86	c3pwlB_	Alignment	not modelled	18.7	17	PDB header: protein binding Chain: B: PDB Molecule: beta-2-microglobulin; PDBTitle: human class i mhc hla-a2 in complex with the hud peptide
87	c3pwpB_	Alignment	not modelled	18.7	17	PDB header: protein binding Chain: B: PDB Molecule: beta-2-microglobulin; PDBTitle: the complex between tcr a6 and human class i mhc hla-a2 with the bound2 hud peptide
88	c3pwlE_	Alignment	not modelled	18.7	17	PDB header: protein binding Chain: E: PDB Molecule: beta-2-microglobulin; PDBTitle: human class i mhc hla-a2 in complex with the hud peptide
89	c3oxrB_	Alignment	not modelled	18.7	17	PDB header: immune system Chain: B: PDB Molecule: beta-2-microglobulin; PDBTitle: crystal structure of hla a*02:06 bound to hbv core 18-27
90	d1k5nb_	Alignment	not modelled	18.7	17	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)
91	c3qzwE_	Alignment	not modelled	18.7	17	PDB header: immune system Chain: E: PDB Molecule: beta-2-microglobulin; PDBTitle: plasticity of human cd8 binding to peptide-hla-a*2402
92	c3qzwB_	Alignment	not modelled	18.7	17	PDB header: immune system Chain: B: PDB Molecule: beta-2-microglobulin; PDBTitle: plasticity of human cd8 binding to peptide-hla-a*2402
93	c3am8C_	Alignment	not modelled	18.7	17	PDB header: immune system Chain: C: PDB Molecule: beta-2-microglobulin; PDBTitle: crystal structure of a human major histocompatibility complex
94	c3mrfB_	Alignment	not modelled	18.7	17	PDB header: immune system Chain: B: PDB Molecule: beta-2-microglobulin; PDBTitle: crystal structure of mhc class i hla-a2 molecule complexed with ebv2 bmlf1-280-288 nonapeptide t4p variant
95	c3mrcB_	Alignment	not modelled	18.7	17	PDB header: immune system Chain: B: PDB Molecule: beta-2-microglobulin; PDBTitle: crystal structure of mhc class i hla-a2 molecule complexed with hcmv2 pp65-495-503 nonapeptide v6c variant
96	c3mr9B_	Alignment	not modelled	18.7	17	PDB header: immune system Chain: B: PDB Molecule: beta-2-microglobulin; PDBTitle: crystal structure of mhc class i hla-a2 molecule complexed with hcmv2 pp65-495-503 nonapeptide m5a variant
97	c3nfjB_	Alignment	not modelled	18.7	17	PDB header: immune system Chain: B: PDB Molecule: beta-2-microglobulin; PDBTitle: recognition of peptide-mhc by a v-delta/v-beta tcr
98	c1zt7C_	Alignment	not modelled	18.6	20	PDB header: immune system Chain: C: PDB Molecule: h-2 class i histocompatibility antigen, k-k PDBTitle: crystal structure of class i mhc h-2kk in complex with a2 nonapeptide
99	d2ig2h2	Alignment	not modelled	18.4	19	Fold: Immunoglobulin-like beta-sandwich Superfamily: Immunoglobulin Family: C1 set domains (antibody constant domain-like)