














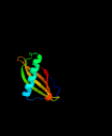






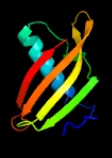

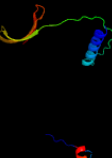

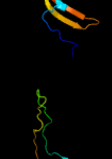


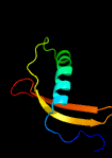
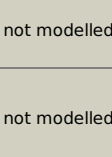


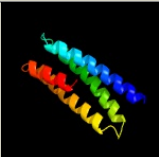
Phyre2

Email	l.a.kelley@imperial.ac.uk
Description	Dangers_of_Intensive
Date	Sun Sep 7 17:29:03 BST 2014
Unique Job ID	093f1646326a5fe1

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d1roaa_	 Alignment		100.0	56	Fold: Cystatin-like Superfamily: Cystatin/monellin Family: Cystatins
2	d1r4ca_	 Alignment		100.0	97	Fold: Cystatin-like Superfamily: Cystatin/monellin Family: Cystatins
3	c2ch9A_	 Alignment		100.0	33	PDB header: inhibitor Chain: A: PDB Molecule: cystatin f; PDBTitle: crystal structure of dimeric human cystatin f
4	d1cewi_	 Alignment		100.0	44	Fold: Cystatin-like Superfamily: Cystatin/monellin Family: Cystatins
5	c4it7C_	 Alignment		100.0	27	PDB header: hydrolase inhibitor Chain: C: PDB Molecule: cpi; PDBTitle: crystal structure of al-cpi
6	c3mwzA_	 Alignment		100.0	25	PDB header: hydrolase inhibitor Chain: A: PDB Molecule: sialostatin I2; PDBTitle: crystal structure of the selenomethionine derivative of the I 22,47,2 100 m mutant of sialostatin I2
7	c3l0rA_	 Alignment		100.0	23	PDB header: hydrolase inhibitor Chain: A: PDB Molecule: cystatin-2; PDBTitle: crystal structure of salivary cystatin from the soft tick ornithodoros2 moubata
8	c4lziA_	 Alignment		99.9	24	PDB header: hydrolase inhibitor Chain: A: PDB Molecule: multicystatin; PDBTitle: characterization of solanum tuberosum multicystatin and significance2 of core domains
9	c2l4vA_	 Alignment		99.9	30	PDB header: hydrolase inhibitor Chain: A: PDB Molecule: cystatin; PDBTitle: three dimensional structure of pineapple cystatin
10	c3lmaD_	 Alignment		99.8	30	PDB header: hydrolase/hydrolase inhibitor Chain: D: PDB Molecule: cysteine proteinase inhibitor; PDBTitle: complex strcuture of tarocystatin and papain
11	d1eqka_	 Alignment		99.8	23	Fold: Cystatin-like Superfamily: Cystatin/monellin Family: Cystatins

12	c2w9pC_	Alignment		99.8	20	PDB header: hydrolase inhibitor Chain: C: PDB Molecule: multicystatin; PDBTitle: crystal structure of potato multicystatin
13	c4eycA_	Alignment		99.8	19	PDB header: unknown function Chain: A: PDB Molecule: cathelicidin antimicrobial peptide; PDBTitle: crystal structure of the cathelin-like domain of human cathelicidin2 ll-37 (hclld)
14	c3ul5C_	Alignment		99.7	25	PDB header: hydrolase inhibitor Chain: C: PDB Molecule: canecystatin-1; PDBTitle: saccharum officinarum canecystatin-1 in space group c2221
15	d2b4cg1	Alignment		99.6	80	Fold: gp120 core Superfamily: gp120 core Family: gp120 core
16	d1stfi_	Alignment		99.5	24	Fold: Cystatin-like Superfamily: Cystatin/monellin Family: Cystatins
17	c3j5ml_	Alignment		99.5	72	PDB header: viral protein/immune system Chain: I: PDB Molecule: bg505 sosisp gp120; PDBTitle: cryo-em structure of the bg505 sosisp.664 hiv-1 env trimer with 3 pggv042 fabs
18	c1ce4A_	Alignment		99.0	85	PDB header: viral protein Chain: A: PDB Molecule: protein (v3 loop of hiv-1 envelope protein); PDBTitle: conformational model for the consensus v3 loop of the2 envelope protein gp120 of hiv-1
19	c3ngbl_	Alignment		98.7	62	PDB header: viral protein/immune system Chain: I: PDB Molecule: envelope glycoprotein gp160; PDBTitle: crystal structure of broadly and potentially neutralizing antibody vrc012 in complex with hiv-1 gp120
20	d1nb5i_	Alignment		98.6	24	Fold: Cystatin-like Superfamily: Cystatin/monellin Family: Cystatins
21	d1kwia_	Alignment	not modelled	97.8	22	Fold: Cystatin-like Superfamily: Cystatin/monellin Family: Cathelicidin motif
22	c4i3rG_	Alignment	not modelled	97.7	51	PDB header: viral protein/immune system Chain: G: PDB Molecule: outer domain of hiv-1 gp120 (ker2018 od4.2.2); PDBTitle: crystal structure of the outer domain of hiv-1 gp120 in complex with2 vrc-pg04 space group p3221
23	d2bo9b1	Alignment	not modelled	97.3	17	Fold: Cystatin-like Superfamily: Cystatin/monellin Family: Latexin-like
24	c2bo9B_	Alignment	not modelled	96.9	18	PDB header: hydrolase Chain: B: PDB Molecule: human latexin; PDBTitle: human carboxypeptidase a4 in complex with human latexin.
25	c3rjqA_	Alignment	not modelled	96.8	84	PDB header: viral protein/immune system Chain: A: PDB Molecule: c186 gp120; PDBTitle: crystal structure of anti-hiv llama vhh antibody a12 in complex with2 c186 gp120
26	c3jwdA_	Alignment	not modelled	96.5	91	PDB header: viral protein Chain: A: PDB Molecule: hiv-1 gp120 envelope glycoprotein; PDBTitle: structure of hiv-1 gp120 with gp41-interactive region: layered2 architecture and basis of conformational mobility
27	c3dnlB_	Alignment	not modelled	96.3	82	PDB header: viral protein Chain: B: PDB Molecule: hiv-1 envelope glycoprotein gp120; PDBTitle: molecular structure for the hiv-1 gp120 trimer in the b12-2 bound state
28	d2nxya1	Alignment	not modelled	96.3	79	Fold: gp120 core Superfamily: gp120 core Family: gp120 core

29	d1yymg1	Alignment	not modelled	95.9	64	Fold: gp120 core Superfamily: gp120 core Family: gp120 core
30	c4ccvA	Alignment	not modelled	93.6	21	PDB header: blood clotting Chain: A: PDB Molecule: histidine-rich glycoprotein; PDBTitle: crystal structure of histidine-rich glycoprotein n2 domain2 reveals redox activity at an interdomain disulfide bridge:3 implications for the regulation of angiogenesis
31	c3mlwQ	Alignment	not modelled	92.1	100	PDB header: immune system Chain: Q: PDB Molecule: hiv-1 gp120 third variable region (v3) crown; PDBTitle: crystal structure of anti-hiv-1 v3 fab 1006-15d in complex with an mn2 v3 peptide
32	c3ujjP	Alignment	not modelled	92.0	100	PDB header: immune system Chain: P: PDB Molecule: envelope glycoprotein gp160; PDBTitle: crystal structure of anti-hiv-1 v3 fab 2558 in complex with mn peptide
33	c3ujjP	Alignment	not modelled	91.8	65	PDB header: immune system Chain: P: PDB Molecule: gp120; PDBTitle: crystal structure of anti-hiv-1 v3 fab 4025 in complex with con a2 peptide
34	c2b1aP	Alignment	not modelled	89.2	75	PDB header: immune system Chain: P: PDB Molecule: ug1033 peptide of exterior membrane glycoprotein gp120; PDBTitle: crystal structure analysis of anti-hiv-1 v3 fab 2219 in complex with2 ug1033 peptide
35	c3mlwP	Alignment	not modelled	88.5	100	PDB header: immune system Chain: P: PDB Molecule: hiv-1 gp120 third variable region (v3) crown; PDBTitle: crystal structure of anti-hiv-1 v3 fab 1006-15d in complex with an mn2 v3 peptide
36	c2kxgA	Alignment	not modelled	80.5	21	PDB header: hydrolase inhibitor Chain: A: PDB Molecule: aspartic protease inhibitor; PDBTitle: the solution structure of the squash aspartic acid proteinase2 inhibitor (sqapi)
37	c2bf1A	Alignment	not modelled	80.0	4	PDB header: virus protein Chain: A: PDB Molecule: exterior membrane glycoprotein gp120; PDBTitle: structure of an unliganded and fully-glycosylated siv gp1202 envelope glycoprotein
38	c1y4cA	Alignment		73.1	12	PDB header: de novo protein Chain: A: PDB Molecule: maltose binding protein fused with designed PDBTitle: designed helical protein fusion mbp
39	c2zv4O	Alignment	not modelled	58.4	17	PDB header: structural protein Chain: O: PDB Molecule: major vault protein; PDBTitle: the structure of rat liver vault at 3.5 angstrom resolution
40	c1acyP	Alignment	not modelled	43.8	91	PDB header: complex(antibody/hiv-1 fragment) Chain: P: PDB Molecule: hiv-1 gp120 (mn isolate); PDBTitle: crystal structure of the principal neutralizing site of hiv-2 1
41	c3mlrP	Alignment	not modelled	40.0	50	PDB header: immune system Chain: P: PDB Molecule: hiv-1 gp120 third variable region (v3) crown; PDBTitle: crystal structure of anti-hiv-1 v3 fab 2557 in complex with a ny5 v32 peptide
42	c2w82C	Alignment	not modelled	31.4	24	PDB header: replication inhibitor Chain: C: PDB Molecule: orf18; PDBTitle: the structure of arda
43	d1fcda3	Alignment	not modelled	29.7	25	Fold: CO dehydrogenase flavoprotein C-domain-like Superfamily: FAD/NAD-linked reductases, dimerisation (C-terminal) domain Family: FAD/NAD-linked reductases, dimerisation (C-terminal) domain
44	c2e4wA	Alignment	not modelled	18.0	26	PDB header: signaling protein Chain: A: PDB Molecule: metabotropic glutamate receptor 3; PDBTitle: crystal structure of the extracellular region of the group ii2 metabotropic glutamate receptor complexed with 1s,3s-acpd
45	c3fewX	Alignment	not modelled	17.4	21	PDB header: immune system Chain: X: PDB Molecule: colicin s4; PDBTitle: structure and function of colicin s4, a colicin with a2 duplicated receptor binding domain
46	c3mlvQ	Alignment	not modelled	15.5	53	PDB header: immune system Chain: Q: PDB Molecule: hiv-1 gp120 third variable region (v3) crown; PDBTitle: crystal structure of anti-hiv-1 v3 fab 2557 in complex with an nof v32 peptide
47	c3mlvP	Alignment	not modelled	15.5	53	PDB header: immune system Chain: P: PDB Molecule: hiv-1 gp120 third variable region (v3) crown; PDBTitle: crystal structure of anti-hiv-1 v3 fab 2557 in complex with an nof v32 peptide
48	c3oqtP	Alignment	not modelled	14.7	21	PDB header: flavoprotein Chain: P: PDB Molecule: rv1498a protein; PDBTitle: crystal structure of rv1498a protein from mycobacterium tuberculosis
49	c3p3wC	Alignment	not modelled	13.8	23	PDB header: transport protein Chain: C: PDB Molecule: glutamate receptor 3; PDBTitle: structure of a dimeric glua3 n-terminal domain (ntd) at 4.2 a2 resolution
50	c3monF	Alignment	not modelled	13.6	23	PDB header: sweet-tasting protein Chain: F: PDB Molecule: monellin; PDBTitle: crystal structures of two intensely sweet proteins
51	d1wkaa1	Alignment	not modelled	12.5	30	Fold: ValRS/IleRS/LeuRS editing domain Superfamily: ValRS/IleRS/LeuRS editing domain Family: ValRS/IleRS/LeuRS editing domain
						PDB header: flavoprotein

52	c2vxaL_	Alignment	not modelled	11.8	29	Chain: L: PDB Molecule: dodecin; PDBTitle: h.halophila dodecin in complex with riboflavin
53	c3onrl_	Alignment	not modelled	11.3	17	PDB header: metal binding protein Chain: I: PDB Molecule: protein transport protein sece2; PDBTitle: crystal structure of the calcium chelating immunodominant antigen,2 calcium dodecin (rv0379),from mycobacterium tuberculosis with a novel3 calcium-binding site
54	c2hlqA_	Alignment	not modelled	11.0	24	PDB header: transferase Chain: A: PDB Molecule: bone morphogenetic protein receptor type-2; PDBTitle: crystal structure of the extracellular domain of the type2 ii bmp receptor
55	c3j20F_	Alignment	not modelled	10.6	10	PDB header: ribosome Chain: F: PDB Molecule: 30s ribosomal protein s5p; PDBTitle: promiscuous behavior of proteins in archaeal ribosomes revealed by2 cryo-em: implications for evolution of eukaryotic ribosomes (30s3 ribosomal subunit)
56	d2ux9a1	Alignment	not modelled	10.5	27	Fold: Dodecin subunit-like Superfamily: Dodecin-like Family: Dodecin-like
57	c4uqqD_	Alignment	not modelled	9.1	17	PDB header: transport protein Chain: D: PDB Molecule: glutamate receptor ionotropic, kainate 2; PDBTitle: electron density map of gluk2 desensitized state in2 complex with 2s,4r-4-methylglutamate
58	c4f11A_	Alignment	not modelled	7.9	20	PDB header: signaling protein Chain: A: PDB Molecule: gamma-aminobutyric acid type b receptor subunit 2; PDBTitle: crystal structure of the extracellular domain of human gaba(b)2 receptor gbr2
59	d2o9ux1	Alignment	not modelled	7.6	23	Fold: Cystatin-like Superfamily: Cystatin/monellin Family: Monellin
60	c3sajB_	Alignment	not modelled	7.6	16	PDB header: transport protein Chain: B: PDB Molecule: glutamate receptor 1; PDBTitle: crystal structure of glutamate receptor glua1 amino terminal domain
61	d1ntga_	Alignment	not modelled	7.4	23	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Myf domain
62	c3heif_	Alignment	not modelled	7.3	27	PDB header: transferase/signaling protein Chain: F: PDB Molecule: ephrin-a1; PDBTitle: ligand recognition by a-class eph receptors: crystal structures of the2 epha2 ligand-binding domain and the epha2/ephrin-a1 complex
63	c1rrqA_	Alignment	not modelled	6.9	36	PDB header: hydrolase/dna Chain: A: PDB Molecule: muty; PDBTitle: muty adenine glycosylase in complex with dna containing an2 a:oxog pair
64	c1zzaA_	Alignment	not modelled	6.8	24	PDB header: membrane protein Chain: A: PDB Molecule: stannin; PDBTitle: solution nmr structure of the membrane protein stannin
65	d1t1ra3	Alignment	not modelled	6.7	57	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Glyceraldehyde-3-phosphate dehydrogenase-like, N-terminal domain
66	d2nqda1	Alignment	not modelled	6.6	50	Fold: Immunoglobulin-like beta-sandwich Superfamily: ICP-like Family: ICP-like
67	d2p3ra1	Alignment	not modelled	6.5	21	Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: Glycerol kinase
68	c2qzvB_	Alignment	not modelled	6.4	11	PDB header: structural protein Chain: B: PDB Molecule: major vault protein; PDBTitle: draft crystal structure of the vault shell at 9 angstroms2 resolution
69	d1mn4a_	Alignment	not modelled	6.4	25	Fold: Common fold of diphtheria toxin/transcription factors/cytochrome f Superfamily: p53-like transcription factors Family: DNA-binding domain from NDT80
70	d1vdda_	Alignment	not modelled	6.3	14	Fold: Recombination protein RecR Superfamily: Recombination protein RecR Family: Recombination protein RecR
71	d1iyka1	Alignment	not modelled	6.3	9	Fold: Acyl-CoA N-acyltransferases (Nat) Superfamily: Acyl-CoA N-acyltransferases (Nat) Family: N-myristoyl transferase, NMT
72	c3om1A_	Alignment	not modelled	6.3	21	PDB header: membrane protein Chain: A: PDB Molecule: glutamate receptor gluk5 (ka2); PDBTitle: crystal structure of the gluk5 (ka2) atd dimer at 1.7 angstrom2 resolution
73	c4kzzC_	Alignment	not modelled	6.2	20	PDB header: ribosome Chain: C: PDB Molecule: 40s ribosomal protein s2; PDBTitle: rabbit 40s ribosomal subunit in complex with mrna, initiator trna and2 eif1a
74	d1dx5i1	Alignment	not modelled	6.2	29	Fold: Knottins (small inhibitors, toxins, lectins) Superfamily: EGF/Laminin Family: EGF-type module
75	c3qwmA_	Alignment	not modelled	6.1	9	PDB header: signaling protein Chain: A: PDB Molecule: iq motif and sec7 domain-containing protein 1; PDBTitle: crystal structure of gep100, the plextrin homology domain of iq motif2 and sec7 domain-containing protein 1 isoform a
76	d1wlta1	Alignment	not modelled	6.1	17	Fold: Double-stranded beta-helix Superfamily: RmIC-like cupins Family: dTDP-sugar isomerase
						PDB header: translation

77	c2kkmA_	Alignment	not modelled	6.0	16	Chain: A: PDB Molecule: translation machinery-associated protein 16; PDBTitle: solution nmr structure of yeast protein yor252w [residues2 38-178]: northeast structural genomics consortium target3 yt654
78	d1m5ha2	Alignment	not modelled	5.9	23	Fold: Ferredoxin-like Superfamily: Formylmethanofuran:tetrahydromethanopterin formyltransferase Family: Formylmethanofuran:tetrahydromethanopterin formyltransferase
79	c3kg2A_	Alignment	not modelled	5.9	8	PDB header: membrane protein, transport protein Chain: A: PDB Molecule: glutamate receptor 2; PDBTitle: ampa subtype ionotropic glutamate receptor in complex with competitive2 antagonist zk 200775
80	d1lica1	Alignment	not modelled	5.8	11	Fold: Acyl-CoA N-acyltransferases (Nat) Superfamily: Acyl-CoA N-acyltransferases (Nat) Family: N-myristoyl transferase, NMT
81	c2xzmE_	Alignment	not modelled	5.8	19	PDB header: ribosome Chain: E: PDB Molecule: ribosomal protein s5 containing protein; PDBTitle: crystal structure of the eukaryotic 40s ribosomal2 subunit in complex with initiation factor 1. this file3 contains the 40s subunit and initiation factor for4 molecule 1
82	c1lupiA_	Alignment	not modelled	5.7	26	PDB header: epimerase Chain: A: PDB Molecule: dtdp-4-dehydrorhamnose 3,5-epimerase; PDBTitle: mycobacterium tuberculosis rmlc epimerase (rv3465)
83	c3h6hB_	Alignment	not modelled	5.7	17	PDB header: membrane protein Chain: B: PDB Molecule: glutamate receptor, ionotropic kainate 2; PDBTitle: crystal structure of the glur6 amino terminal domain dimer assembly2 mpd form
84	d1zc6a1	Alignment	not modelled	5.7	27	Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: BadF/BadG/BcrA/BcrD-like
85	c3zeyP_	Alignment	not modelled	5.6	13	PDB header: ribosome Chain: P: PDB Molecule: 40s ribosomal protein s2, putative; PDBTitle: high-resolution cryo-electron microscopy structure of the trypanosoma2 brucei ribosome
86	c3pz6F_	Alignment	not modelled	5.6	20	PDB header: ligase Chain: F: PDB Molecule: leucyl-trna synthetase; PDBTitle: the crystal structure of glleurs-cp1
87	d2bvya1	Alignment	not modelled	5.5	33	Fold: Immunoglobulin-like beta-sandwich Superfamily: E set domains Family: E-set domains of sugar-utilizing enzymes
88	c2lmkA_	Alignment	not modelled	5.5	20	PDB header: signaling protein Chain: A: PDB Molecule: exocrine gland-secreting peptide 1; PDBTitle: solution structure of mouse pheromone esp1
89	c4e1jA_	Alignment	not modelled	5.5	32	PDB header: transferase Chain: A: PDB Molecule: glycerol kinase; PDBTitle: crystal structure of glycerol kinase in complex with glycerol from2 sinorhizobium meliloti 1021
90	d2j5la1	Alignment	not modelled	5.4	28	Fold: Apical membrane antigen 1 Superfamily: Apical membrane antigen 1 Family: Apical membrane antigen 1
91	c2j5lA_	Alignment	not modelled	5.4	28	PDB header: immune system Chain: A: PDB Molecule: apical membrane antigen 1; PDBTitle: structure of a plasmodium falciparum apical membrane2 antigen 1-fab f8.12.19 complex
92	d1jb3a_	Alignment	not modelled	5.4	8	Fold: OB-fold Superfamily: TIMP-like Family: The laminin-binding domain of agrin
93	d1dzra_	Alignment	not modelled	5.3	21	Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: dTDP-sugar isomerase
94	c2wfdB_	Alignment	not modelled	5.3	20	PDB header: ligase Chain: B: PDB Molecule: leucyl-trna synthetase, cytoplasmic; PDBTitle: structure of the human cytosolic leucyl-trna synthetase2 editing domain
95	c1m5hF_	Alignment	not modelled	5.2	23	PDB header: transferase Chain: F: PDB Molecule: formylmethanofuran--tetrahydromethanopterin PDBTitle: formylmethanofuran:tetrahydromethanopterin2 formyltransferase from archaeoglobus fulgidus
96	c2ysaA_	Alignment	not modelled	5.2	28	PDB header: metal binding protein Chain: A: PDB Molecule: retinoblastoma-binding protein 6; PDBTitle: solution structure of the zinc finger cchc domain from the2 human retinoblastoma-binding protein 6 (retinoblastoma-3 binding q protein 1, rbq-1)
97	c2fwvA_	Alignment	not modelled	5.2	17	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical protein mtubf_01000852; PDBTitle: crystal structure of rv0813
98	c1vddC_	Alignment	not modelled	5.2	13	PDB header: recombination Chain: C: PDB Molecule: recombination protein recr; PDBTitle: crystal structure of recombinational repair protein recr
99	d1gr0a2	Alignment	not modelled	5.2	19	Fold: FwdE/GAPDH domain-like Superfamily: Glyceraldehyde-3-phosphate dehydrogenase-like, C-terminal domain Family: Dihydrodipicolinate reductase-like