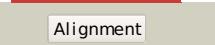
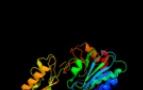
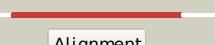
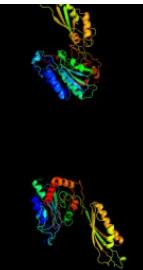
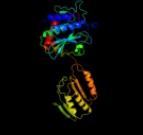
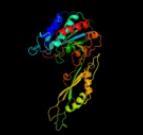


Phyre²

Email	i.a.kelley@imperial.ac.uk
Description	P23908
Date	Thu Jan 5 11:40:32 GMT 2012
Unique Job ID	124537fef6d74c17

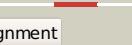
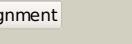
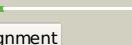
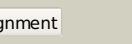
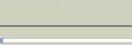
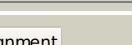
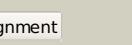
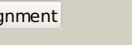
Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c3pfoB_			100.0	22	PDB header: hydrolase Chain: B; PDB Molecule: putative acetylornithine deacetylase; PDBTitle: crystal structure of a putative acetylornithine deacetylase (rpa2325)2 from rhodopseudomonas palustris cga009 at 1.90 a resolution
2	c2rb7A_			100.0	24	PDB header: hydrolase Chain: A; PDB Molecule: peptidase, m20/m25/m40 family; PDBTitle: crystal structure of co-catalytic metallopeptidase (yp_387682.1) from2 desulfovibrio desulfuricans g20 at 1.60 a resolution
3	c2pokB_			100.0	22	PDB header: hydrolase Chain: B; PDB Molecule: peptidase, m20/m25/m40 family; PDBTitle: crystal structure of a m20 family metallo peptidase from streptococcus2 pneumoniae
4	c2zogA_			100.0	20	PDB header: hydrolase Chain: A; PDB Molecule: cytosolic non-specific dipeptidase; PDBTitle: crystal structure of mouse carnosinase cn2 complexed with zn and2 bestatin
5	c1cg2D_			100.0	23	PDB header: metalcarboxypeptidase Chain: D; PDB Molecule: carboxypeptidase g2; PDBTitle: carboxypeptidase g2
6	c1vgvB_			100.0	24	PDB header: structural genomics, unknown function Chain: B; PDB Molecule: succinyl-diaminopimelate desuccinylase; PDBTitle: crystal structure of succinyl diaminopimelate desuccinylase
7	c2f7vA_			100.0	25	PDB header: hydrolase Chain: A; PDB Molecule: acetylarginine deacetylase; PDBTitle: structure of acetylarginine deacetylase complexed with2 one co
8	c3dljB_			100.0	18	PDB header: hydrolase Chain: B; PDB Molecule: beta-alanine dipeptidase; PDBTitle: crystal structure of human carnosine dipeptidase 1
9	c1lfwA_			100.0	20	PDB header: hydrolase Chain: A; PDB Molecule: pepV; PDBTitle: crystal structure of pepV
10	c3pfeA_			100.0	17	PDB header: hydrolase Chain: A; PDB Molecule: succinyl-diaminopimelate desuccinylase; PDBTitle: crystal structure of a m20a metallo peptidase (dape, lpg0809) from2 legionella pneumophila subsp. pneumophila str. philadelphia 1 at 1.503 a resolution
11	c3ic1A_			100.0	23	PDB header: hydrolase Chain: A; PDB Molecule: succinyl-diaminopimelate desuccinylase; PDBTitle: crystal structure of zinc-bound succinyl-diaminopimelate desuccinylase2 from haemophilus influenzae

12	c3ct9B_	Alignment		100.0	24	PDB header: hydrolase Chain: B: PDB Molecule: acetylornithine deacetylase; PDBTitle: crystal structure of a putative zinc peptidase (np_812461.1) from2 bacteroides thetaiotaomicron vpi-5482 at 2.31 a resolution
13	c3gb0A_	Alignment		100.0	21	PDB header: hydrolase Chain: A: PDB Molecule: peptidase t; PDBTitle: crystal structure of aminopeptidase pept (np_980509.1) from bacillus2 cereus atcc 10987 at 2.04 a resolution
14	c3khzA_	Alignment		100.0	18	PDB header: hydrolase Chain: A: PDB Molecule: putative dipeptidase sacol1801; PDBTitle: crystal structure of r350a mutant of staphylococcus aureus2 metallopeptidase (sapep/dape) in the apo-form
15	c3rzaA_	Alignment		100.0	20	PDB header: hydrolase Chain: A: PDB Molecule: tripeptidase; PDBTitle: crystal structure of a tripeptidase (sav1512) from staphylococcus2 aureus subsp. aureus mu50 at 2.10 a resolution
16	c3mruB_	Alignment		100.0	20	PDB header: hydrolase Chain: B: PDB Molecule: aminoacyl-histidine dipeptidase; PDBTitle: crystal structure of aminoacylhistidine dipeptidase from vibrio2 alginolyticus
17	c3tx8A_	Alignment		100.0	24	PDB header: hydrolase Chain: A: PDB Molecule: succinyl-diaminopimelate desuccinylase; PDBTitle: crystal structure of a succinyl-diaminopimelate desuccinylase (arge)2 from corynebacterium glutamicum atcc 13032 at 2.97 a resolution
18	c1ysjB_	Alignment		100.0	15	PDB header: hydrolase Chain: B: PDB Molecule: protein yxep; PDBTitle: crystal structure of bacillus subtilis yxep protein (apc1829), a2 dinuclear metal binding peptidase from m20 family
19	c3ramC_	Alignment		100.0	15	PDB header: hydrolase Chain: C: PDB Molecule: hmra protein; PDBTitle: crystal structure of hmra
20	c2qyvB_	Alignment		100.0	23	PDB header: hydrolase Chain: B: PDB Molecule: xxa-his dipeptidase; PDBTitle: crystal structure of putative xxa-his dipeptidase (yp_718209.1) from2 haemophilus somnus 129pt at 2.11 a resolution
21	c3ifeA_	Alignment	not modelled	100.0	15	PDB header: hydrolase Chain: A: PDB Molecule: peptidase t; PDBTitle: 1.55 angstrom resolution crystal structure of peptidase t (pept-1)2 from bacillus anthracis str. 'ames ancestor'.
22	c1vixA_	Alignment	not modelled	100.0	16	PDB header: hydrolase Chain: A: PDB Molecule: peptidase t; PDBTitle: crystal structure of a putative peptidase t
23	c2q43A_	Alignment	not modelled	100.0	13	PDB header: hydrolase Chain: A: PDB Molecule: iaa-amino acid hydrolase ilr1-like 2; PDBTitle: ensemble refinement of the protein crystal structure of iaa-aminoacid2 hydrolase from arabidopsis thaliana gene at5g56660
24	c3n5fB_	Alignment	not modelled	100.0	18	PDB header: hydrolase Chain: B: PDB Molecule: n-carbamoyl-l-amino acid hydrolase; PDBTitle: crystal structure of l-n-carbamoylase from geobacillus2 stearothermophilus cect43
25	c21moA_	Alignment	not modelled	100.0	15	PDB header: hydrolase Chain: A: PDB Molecule: allantoate amidohydrolase; PDBTitle: crystal structure of allantoate amidohydrolase from escherichia coli2 at ph 4.6
26	c2v8gD_	Alignment	not modelled	100.0	16	PDB header: hydrolase Chain: D: PDB Molecule: beta-alanine synthase; PDBTitle: crystal structure of beta-alanine synthase from2 saccharomyces kluyveri in complex with the product beta-3 alanine
27	c3io1B_	Alignment	not modelled	100.0	13	PDB header: hydrolase Chain: B: PDB Molecule: aminobenzoyl-glutamate utilization protein; PDBTitle: crystal structure of aminobenzoyl-glutamate utilization2 protein from klebsiella pneumoniae
28	d1lfwa1	Alignment	not modelled	100.0	24	Fold: Phosphorylase/hydrolase-like Superfamily: Zn-dependent exopeptidases Family: Bacterial dinuclear zinc exopeptidases

29	c1vheA	Alignment	not modelled	100.0	12	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: aminopeptidase/glucanase homolog; PDBTitle: crystal structure of a aminopeptidase/glucanase homolog
30	c2cf4A	Alignment	not modelled	100.0	16	PDB header: hydrolase Chain: A: PDB Molecule: protein ph0519; PDBTitle: pyrococcus horikoshii tetI peptidase can assemble into a2 tetrahedron or a large octahedral shell
31	c3isxA	Alignment	not modelled	100.0	12	PDB header: hydrolase Chain: A: PDB Molecule: endoglucanase; PDBTitle: crystal structure of endoglucanase (tm1050) from thermotoga2 maritima at 1.40 a resolution
32	d1cg2a1	Alignment	not modelled	100.0	28	Fold: Phosphorylase/hydrolase-like Superfamily: Zn-dependent exopeptidases Family: Bacterial dinuclear zinc exopeptidases
33	c1yloA	Alignment	not modelled	100.0	15	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical protein sf2450; PDBTitle: crystal structure of protein of unknown function (possible2 aminopeptidase) s2589 from shigella flexneri 2a str. 2457t
34	c1y0yA	Alignment	not modelled	100.0	13	PDB header: hydrolase Chain: A: PDB Molecule: frv operon protein frvx; PDBTitle: crystal structure of tetrahedral aminopeptidase from p. horikoshii in2 complex with amastatin
35	c2pe3A	Alignment	not modelled	100.0	13	PDB header: hydrolase Chain: A: PDB Molecule: 354aa long hypothetical operon protein frv; PDBTitle: crystal structure of frv operon protein frvx (ph1821)from pyrococcus2 horikoshii o3
36	c3t6mA	Alignment	not modelled	100.0	27	PDB header: hydrolase Chain: A: PDB Molecule: succinyl-diaminopimelate desuccinylase; PDBTitle: crystal structure of the catalytic domain of dape protein from2 v.cholerae in the zn bound form
37	c3kl9F	Alignment	not modelled	100.0	13	PDB header: hydrolase Chain: F: PDB Molecule: glutamyl aminopeptidase; PDBTitle: crystal structure of pepa from streptococcus pneumoniae
38	c1vh0A	Alignment	not modelled	100.0	11	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: endoglucanase; PDBTitle: crystal structure of a putative peptidase/endoglucanase
39	d1vixal	Alignment	not modelled	100.0	20	Fold: Phosphorylase/hydrolase-like Superfamily: Zn-dependent exopeptidases Family: Bacterial dinuclear zinc exopeptidases
40	d1z2la1	Alignment	not modelled	100.0	13	Fold: Phosphorylase/hydrolase-like Superfamily: Zn-dependent exopeptidases Family: Bacterial dinuclear zinc exopeptidases
41	d1vgya1	Alignment	not modelled	100.0	24	Fold: Phosphorylase/hydrolase-like Superfamily: Zn-dependent exopeptidases Family: Bacterial dinuclear zinc exopeptidases
42	c2fgvA	Alignment	not modelled	100.0	14	PDB header: hydrolase Chain: A: PDB Molecule: endoglucanase; PDBTitle: crystal structure of endoglucanase (tm1049) from thermotoga maritima2 at 2.01 a resolution
43	d1fnoa4	Alignment	not modelled	100.0	19	Fold: Phosphorylase/hydrolase-like Superfamily: Zn-dependent exopeptidases Family: Bacterial dinuclear zinc exopeptidases
44	c3cpxC	Alignment	not modelled	100.0	14	PDB header: hydrolase Chain: C: PDB Molecule: aminopeptidase, m42 family; PDBTitle: crystal structure of putative m42 glutamyl aminopeptidase2 (yp_676701.1) from cytophaga hutchinsonii atcc 33406 at 2.39 a3 resolution
45	c1q7IA	Alignment	not modelled	100.0	21	PDB header: hydrolase Chain: A: PDB Molecule: aminoacylase-1; PDBTitle: zn-binding domain of the t347g mutant of human aminoacylase-2 i
46	d1yloa2	Alignment	not modelled	100.0	21	Fold: Phosphorylase/hydrolase-like Superfamily: Zn-dependent exopeptidases Family: Bacterial dinuclear zinc exopeptidases
47	d1vhea2	Alignment	not modelled	100.0	22	Fold: Phosphorylase/hydrolase-like Superfamily: Zn-dependent exopeptidases Family: Bacterial dinuclear zinc exopeptidases
48	d1xmba1	Alignment	not modelled	100.0	20	Fold: Phosphorylase/hydrolase-like Superfamily: Zn-dependent exopeptidases Family: Bacterial dinuclear zinc exopeptidases
49	d1r3na1	Alignment	not modelled	100.0	17	Fold: Phosphorylase/hydrolase-like Superfamily: Zn-dependent exopeptidases Family: Bacterial dinuclear zinc exopeptidases
50	d1xfoa2	Alignment	not modelled	99.9	23	Fold: Phosphorylase/hydrolase-like Superfamily: Zn-dependent exopeptidases Family: Bacterial dinuclear zinc exopeptidases
51	d1vhoa2	Alignment	not modelled	99.9	19	Fold: Phosphorylase/hydrolase-like Superfamily: Zn-dependent exopeptidases Family: Bacterial dinuclear zinc exopeptidases
52	d1ysja1	Alignment	not modelled	99.9	19	Fold: Phosphorylase/hydrolase-like Superfamily: Zn-dependent exopeptidases Family: Bacterial dinuclear zinc exopeptidases
53	c2greC	Alignment	not modelled	99.9	21	PDB header: hydrolase Chain: C: PDB Molecule: deblocking aminopeptidase; PDBTitle: crystal structure of deblocking aminopeptidase from bacillus cereus
54	d2fvga2	Alignment	not modelled	99.8	20	Fold: Phosphorylase/hydrolase-like Superfamily: Zn-dependent exopeptidases Family: Bacterial dinuclear zinc exopeptidases

55	d2grea2	Alignment	not modelled	99.7	17	Fold: Phosphorylase/hydrolase-like Superfamily: Zn-dependent exopeptidases Family: Bacterial dinuclear zinc exopeptidases
56	d1z2la2	Alignment	not modelled	99.6	11	Fold: Ferredoxin-like Superfamily: Bacterial exopeptidase dimerisation domain Family: Bacterial exopeptidase dimerisation domain
57	d1vgya2	Alignment	not modelled	99.6	19	Fold: Ferredoxin-like Superfamily: Bacterial exopeptidase dimerisation domain Family: Bacterial exopeptidase dimerisation domain
58	d1tkja1	Alignment	not modelled	99.6	17	Fold: Phosphorylase/hydrolase-like Superfamily: Zn-dependent exopeptidases Family: Bacterial dinuclear zinc exopeptidases
59	d1rtqa_	Alignment	not modelled	99.6	18	Fold: Phosphorylase/hydrolase-like Superfamily: Zn-dependent exopeptidases Family: Bacterial dinuclear zinc exopeptidases
60	d1cg2a2	Alignment	not modelled	99.6	20	Fold: Ferredoxin-like Superfamily: Bacterial exopeptidase dimerisation domain Family: Bacterial exopeptidase dimerisation domain
61	c3tc8A_	Alignment	not modelled	99.5	18	PDB header: hydrolase Chain: A: PDB Molecule: leucine aminopeptidase; PDBTitle: crystal structure of a hypothetical zn-dependent exopeptidase2 (bdi_3547) from parabacteroides distasonis atcc 8503 at 1.06 a3 resolution
62	d1r3na2	Alignment	not modelled	99.5	11	Fold: Ferredoxin-like Superfamily: Bacterial exopeptidase dimerisation domain Family: Bacterial exopeptidase dimerisation domain
63	c2ek8A_	Alignment	not modelled	99.4	24	PDB header: hydrolase Chain: A: PDB Molecule: aminopeptidase; PDBTitle: aminopeptidase from aneurinibacillus sp. strain am-1
64	d1ysja2	Alignment	not modelled	99.4	14	Fold: Ferredoxin-like Superfamily: Bacterial exopeptidase dimerisation domain Family: Bacterial exopeptidase dimerisation domain
65	d2afwa1	Alignment	not modelled	99.4	19	Fold: Phosphorylase/hydrolase-like Superfamily: Zn-dependent exopeptidases Family: Glutaminyl-peptide cyclotransferase-like
66	c3guxA_	Alignment	not modelled	99.4	18	PDB header: hydrolase Chain: A: PDB Molecule: putative zn-dependent exopeptidase; PDBTitle: crystal structure of a putative zn-dependent exopeptidase (bvu_1317)2 from bacteroides vulgatus atcc 8482 at 1.80 a resolution
67	c3pb6X_	Alignment	not modelled	99.3	25	PDB header: transferase Chain: X: PDB Molecule: glutaminyl-peptide cyclotransferase-like protein; PDBTitle: crystal structure of the catalytic domain of human golgi-resident2 glutaminyl cyclase at ph 6.5
68	c1q7IB_	Alignment	not modelled	99.2	18	PDB header: hydrolase Chain: B: PDB Molecule: aminoacylase-1; PDBTitle: zn-binding domain of the t347g mutant of human aminoacylase-2 i
69	d1lfwa2	Alignment	not modelled	99.1	13	Fold: Ferredoxin-like Superfamily: Bacterial exopeptidase dimerisation domain Family: Bacterial exopeptidase dimerisation domain
70	d1y0ya2	Alignment	not modelled	99.0	21	Fold: Phosphorylase/hydrolase-like Superfamily: Zn-dependent exopeptidases Family: Bacterial dinuclear zinc exopeptidases
71	d3bi1a3	Alignment	not modelled	99.0	18	Fold: Phosphorylase/hydrolase-like Superfamily: Zn-dependent exopeptidases Family: FolH catalytic domain-like
72	d1de4c3	Alignment	not modelled	98.9	13	Fold: Phosphorylase/hydrolase-like Superfamily: Zn-dependent exopeptidases Family: FolH catalytic domain-like
73	d1xmba2	Alignment	not modelled	98.9	13	Fold: Ferredoxin-like Superfamily: Bacterial exopeptidase dimerisation domain Family: Bacterial exopeptidase dimerisation domain
74	c3iibA_	Alignment	not modelled	98.6	24	PDB header: hydrolase Chain: A: PDB Molecule: peptidase m28; PDBTitle: crystal structure of peptidase m28 precursor (yp_926796.1) from shewanella amazonensis sb2b at 1.70 a resolution
75	d1y7ea2	Alignment	not modelled	98.5	16	Fold: Phosphorylase/hydrolase-like Superfamily: Zn-dependent exopeptidases Family: Bacterial dinuclear zinc exopeptidases
76	c2ootA_	Alignment	not modelled	98.4	19	PDB header: hydrolase Chain: A: PDB Molecule: glutamate carboxypeptidase 2; PDBTitle: a high resolution structure of ligand-free human glutamate2 carboxypeptidase ii
77	c3rbuA_	Alignment	not modelled	98.3	19	PDB header: hydrolase/hydrolase inhibitor Chain: A: PDB Molecule: glutamate carboxypeptidase 2; PDBTitle: n-terminally avt/ev-tagged human glutamate carboxypeptidase ii in2 complex with 2-pmpa
78	c1cx8F_	Alignment	not modelled	98.2	14	PDB header: metal transport Chain: F: PDB Molecule: transferrin receptor protein; PDBTitle: crystal structure of the ectodomain of human transferrin receptor
79	d1fnoa3	Alignment	not modelled	98.1	18	Fold: Ferredoxin-like Superfamily: Bacterial exopeptidase dimerisation domain Family: Bacterial exopeptidase dimerisation domain
80	c2glfB_	Alignment	not modelled	97.4	19	PDB header: hydrolase Chain: B: PDB Molecule: probable m18-family aminopeptidase 1; PDBTitle: crystal structure of aminopeptidase (m18 family) from thermotoga2 maritima

81	c3l6sA		Alignment	not modelled	97.4	19	PDB header: hydrolase Chain: A: PDB Molecule: aspartyl aminopeptidase; PDBTitle: crystal structure of human aspartyl aminopeptidase (dnpep),2 in complex with aspartic acid hydroxamate
82	c1y7eA		Alignment	not modelled	97.1	14	PDB header: hydrolase Chain: A: PDB Molecule: probable m18-family aminopeptidase 1; PDBTitle: the crystal structure of aminopeptidase i from borrelia burgdorferi2 b31
83	c3k9tA		Alignment	not modelled	96.6	14	PDB header: hydrolase Chain: A: PDB Molecule: putative peptidase; PDBTitle: crystal structure of putative peptidase (np_348812.1) from clostridium2 acetobutylicum at 2.37 a resolution
84	c2ijzF		Alignment	not modelled	96.3	10	PDB header: hydrolase Chain: F: PDB Molecule: probable m18-family aminopeptidase 2; PDBTitle: crystal structure of aminopeptidase
85	c2gliR		Alignment	not modelled	96.2	14	PDB header: hydrolase Chain: R: PDB Molecule: PDBTitle: crystal structure of aminopeptidase i from clostridium2 acetobutylicum
86	c3peiA		Alignment	not modelled	72.8	10	PDB header: hydrolase Chain: A: PDB Molecule: cytosol aminopeptidase; PDBTitle: crystal structure of cytosol aminopeptidase from francisella2 tularensis
87	c3kzwD		Alignment	not modelled	60.2	17	PDB header: hydrolase Chain: D: PDB Molecule: cytosol aminopeptidase; PDBTitle: crystal structure of cytosol aminopeptidase from staphylococcus aureus2 col
88	d1lama1		Alignment	not modelled	54.6	19	Fold: Phosphorylase/hydrolase-like Superfamily: Zn-dependent exopeptidases Family: Leucine aminopeptidase, C-terminal domain
89	c1lanA		Alignment	not modelled	50.3	19	PDB header: hydrolase (alpha-aminoacylpeptide) Chain: A: PDB Molecule: leucine aminopeptidase; PDBTitle: leucine aminopeptidase complex with l-leucinal
90	d2gb3a1		Alignment	not modelled	40.3	18	Fold: PLP-dependent transferase-like Superfamily: PLP-dependent transferases Family: AAT-like
91	d1gyta2		Alignment	not modelled	34.3	16	Fold: Phosphorylase/hydrolase-like Superfamily: Zn-dependent exopeptidases Family: Leucine aminopeptidase, C-terminal domain
92	c3h8gC		Alignment	not modelled	30.5	19	PDB header: hydrolase Chain: C: PDB Molecule: cytosol aminopeptidase; PDBTitle: bestatin complex structure of leucine aminopeptidase from pseudomonas2 putida
93	c3ij3A		Alignment	not modelled	28.5	27	PDB header: hydrolase Chain: A: PDB Molecule: cytosol aminopeptidase; PDBTitle: 1.8 angstrom resolution crystal structure of cytosol aminopeptidase2 from coxiella burnetii
94	c2hc9A		Alignment	not modelled	22.5	22	PDB header: hydrolase Chain: A: PDB Molecule: leucine aminopeptidase 1; PDBTitle: structure of caenorhabditis elegans leucine aminopeptidase-zinc2 complex (lap1)
95	c3kr5E		Alignment	not modelled	20.9	14	PDB header: hydrolase Chain: E: PDB Molecule: m17 leucyl aminopeptidase; PDBTitle: structure of a protease 4
96	d1aoya		Alignment	not modelled	17.7	19	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Arginine repressor (ArgR), N-terminal DNA-binding domain
97	d1gxha		Alignment	not modelled	15.6	23	Fold: Acyl carrier protein-like Superfamily: Colicin E immunity proteins Family: Colicin E immunity proteins
98	c3jruB		Alignment	not modelled	14.9	21	PDB header: hydrolase Chain: B: PDB Molecule: probable cytosol aminopeptidase; PDBTitle: crystal structure of leucyl aminopeptidase (pepa) from xoo0834,2 xanthomonas oryzae pv. oryzae kacc10331
99	d1jhfa1		Alignment	not modelled	14.8	20	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: LexA repressor, N-terminal DNA-binding domain