

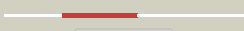






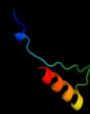









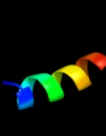




Phyre2

Email	l.a.kelley@imperial.ac.uk
Description	P43674
Date	Thu Jan 5 12:02:29 GMT 2012
Unique Job ID	befdc98c827df089

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c3c37B_	 Alignment		100.0	26	PDB header: hydrolase Chain: B: PDB Molecule: peptidase, m48 family; PDBTitle: x-ray structure of the putative zn-dependent peptidase q74d82 at the2 resolution 1.7 a. northeast structural genomics consortium target3 gsr143a
2	c3cqbB_	 Alignment		99.7	26	PDB header: hydrolase Chain: B: PDB Molecule: probable protease htpx homolog; PDBTitle: crystal structure of heat shock protein htpx domain from vibrio2 parahaemolyticus rimd 2210633
3	c3dtkA_	 Alignment		97.4	17	PDB header: gene regulation Chain: A: PDB Molecule: irre protein; PDBTitle: crystal structure of the irre protein, a central regulator2 of dna damage repair in deinococcaceae
4	c3b7uX_	 Alignment		91.3	22	PDB header: hydrolase Chain: X: PDB Molecule: leukotriene a-4 hydrolase; PDBTitle: leukotriene a4 hydrolase complexed with kelatorphan
5	d2ejqa1	 Alignment		89.3	19	Fold: Zincin-like Superfamily: Metalloproteases ("zincins"), catalytic domain Family: TTHA0227-like
6	c3ciaA_	 Alignment		87.3	11	PDB header: hydrolase Chain: A: PDB Molecule: cold-active aminopeptidase; PDBTitle: crystal structure of cold-aminopeptidase from colwellia2 psychrerythraea
7	c2gtqA_	 Alignment		86.7	13	PDB header: hydrolase Chain: A: PDB Molecule: aminopeptidase n; PDBTitle: crystal structure of aminopeptidase n from human pathogen neisseria2 meningitidis
8	d1r55a_	 Alignment		86.7	25	Fold: Zincin-like Superfamily: Metalloproteases ("zincins"), catalytic domain Family: Reprolysin-like
9	c3ebhA_	 Alignment		86.2	19	PDB header: hydrolase inhibitor Chain: A: PDB Molecule: m1 family aminopeptidase; PDBTitle: structure of the m1 alanylaminopeptidase from malaria complexed with2 bestatin
10	c2xs4A_	 Alignment		86.1	36	PDB header: hydrolase Chain: A: PDB Molecule: karilysin protease; PDBTitle: structure of karilysin catalytic mmp domain in complex with2 magnesium
11	d1atla_	 Alignment		84.7	28	Fold: Zincin-like Superfamily: Metalloproteases ("zincins"), catalytic domain Family: Reprolysin-like

12	c3b37A_	Alignment		84.6	13	PDB header: hydrolase Chain: A: PDB Molecule: aminopeptidase n; PDBTitle: crystal structure of e. coli aminopeptidase n in complex with tyrosine
13	d2i47a1	Alignment		84.4	39	Fold: Zincin-like Superfamily: Metalloproteases ("zincins"), catalytic domain Family: TNF-alpha converting enzyme, TACE, catalytic domain
14	c2i47A_	Alignment		84.4	44	PDB header: hydrolase Chain: A: PDB Molecule: adam 17; PDBTitle: crystal structure of catalytic domain of tace with inhibitor
15	c3k7lA_	Alignment		84.2	33	PDB header: hydrolase Chain: A: PDB Molecule: atragin; PDBTitle: structures of two elapid snake venom metalloproteases with2 distinct activities highlight the disulfide patterns in the3 d domain of adamalysin family proteins
16	d1bqqm_	Alignment		83.8	50	Fold: Zincin-like Superfamily: Metalloproteases ("zincins"), catalytic domain Family: Matrix metalloproteases, catalytic domain
17	c2dw1B_	Alignment		83.6	33	PDB header: apoptosis, toxin Chain: B: PDB Molecule: catrocollastatin; PDBTitle: crystal structure of vap2 from crotalus atrox venom (form 2-2 crystal)
18	d1bswa_	Alignment		83.5	27	Fold: Zincin-like Superfamily: Metalloproteases ("zincins"), catalytic domain Family: Reprolysin-like
19	d1rm8a_	Alignment		83.4	43	Fold: Zincin-like Superfamily: Metalloproteases ("zincins"), catalytic domain Family: Matrix metalloproteases, catalytic domain
20	c2erpA_	Alignment		83.4	22	PDB header: toxin Chain: A: PDB Molecule: vascular apoptosis-inducing protein 1; PDBTitle: crystal structure of vascular apoptosis-inducing protein-1(inhibitor-2 bound form)
21	d2ovxa1	Alignment	not modelled	83.3	29	Fold: Zincin-like Superfamily: Metalloproteases ("zincins"), catalytic domain Family: Matrix metalloproteases, catalytic domain
22	d1y93a1	Alignment	not modelled	82.9	29	Fold: Zincin-like Superfamily: Metalloproteases ("zincins"), catalytic domain Family: Matrix metalloproteases, catalytic domain
23	d1u4ga_	Alignment	not modelled	82.8	23	Fold: Zincin-like Superfamily: Metalloproteases ("zincins"), catalytic domain Family: Thermolysin-like
24	c3sksA_	Alignment	not modelled	82.8	12	PDB header: hydrolase Chain: A: PDB Molecule: putative oligoendopeptidase f; PDBTitle: crystal structure of a putative oligoendopeptidase f from bacillus2 anthracis str. ames
25	c3nqxA_	Alignment	not modelled	82.5	22	PDB header: hydrolase Chain: A: PDB Molecule: secreted metalloprotease mcp02; PDBTitle: crystal structure of vibriolysin mcp-02 mature enzyme, a zinc2 metalloprotease from m4 family
26	d1qiba_	Alignment	not modelled	82.4	36	Fold: Zincin-like Superfamily: Metalloproteases ("zincins"), catalytic domain Family: Matrix metalloproteases, catalytic domain
27	d1cxva_	Alignment	not modelled	82.3	43	Fold: Zincin-like Superfamily: Metalloproteases ("zincins"), catalytic domain Family: Matrix metalloproteases, catalytic domain
28	d1xuca1	Alignment	not modelled	82.2	36	Fold: Zincin-like Superfamily: Metalloproteases ("zincins"), catalytic domain Family: Matrix metalloproteases, catalytic domain
						PDB header: hydrolase Chain: A: PDB Molecule: k-like;

29	c3k7nA_	Alignment	not modelled	82.1	31	PDBTitle: structures of two elapid snake venom metalloproteases with2 distinct activities highlight the disulfide patterns in the3 d domain of adamalysin family proteins
30	c2e3xA_	Alignment	not modelled	81.9	36	PDB header: hydrolase, blood clotting, toxin Chain: A: PDB Molecule: coagulation factor x-activating enzyme heavy chain; PDBTitle: crystal structure of russell's viper venom metalloproteinase
31	d1hv5a_	Alignment	not modelled	81.8	43	Fold: Zincin-like Superfamily: Metalloproteases ("zincins"), catalytic domain Family: Matrix metalloproteases, catalytic domain
32	d1i76a_	Alignment	not modelled	81.7	36	Fold: Zincin-like Superfamily: Metalloproteases ("zincins"), catalytic domain Family: Matrix metalloproteases, catalytic domain
33	c3qnfA_	Alignment	not modelled	81.6	14	PDB header: hydrolase Chain: A: PDB Molecule: endoplasmic reticulum aminopeptidase 1; PDBTitle: crystal structure of the open state of human endoplasmic reticulum2 aminopeptidase 1 erap1
34	d4aiga_	Alignment	not modelled	81.4	31	Fold: Zincin-like Superfamily: Metalloproteases ("zincins"), catalytic domain Family: Reprolysin-like
35	d1hfca_	Alignment	not modelled	81.3	43	Fold: Zincin-like Superfamily: Metalloproteases ("zincins"), catalytic domain Family: Matrix metalloproteases, catalytic domain
36	d1hy7a_	Alignment	not modelled	81.1	36	Fold: Zincin-like Superfamily: Metalloproteases ("zincins"), catalytic domain Family: Matrix metalloproteases, catalytic domain
37	c3p24C_	Alignment	not modelled	81.0	58	PDB header: hydrolase Chain: C: PDB Molecule: bft-3; PDBTitle: structure of profragilysin-3 from bacteroides fragilis
38	d1mmqa_	Alignment	not modelled	81.0	36	Fold: Zincin-like Superfamily: Metalloproteases ("zincins"), catalytic domain Family: Matrix metalloproteases, catalytic domain
39	c2cltB_	Alignment	not modelled	80.7	36	PDB header: hydrolase Chain: B: PDB Molecule: interstitial collagenase; PDBTitle: crystal structure of the active form (full-length) of human2 fibroblast collagenase.
40	c1yp1A_	Alignment	not modelled	80.3	38	PDB header: hydrolase Chain: A: PDB Molecule: fii; PDBTitle: crystal structure of a non-hemorrhagic fibrin(ogen)olytic2 metalloproteinase from venom of agkistrodon acutus
41	c2xpyA_	Alignment	not modelled	80.2	16	PDB header: hydrolase Chain: A: PDB Molecule: leukotriene a-4 hydrolase; PDBTitle: structure of native leukotriene a4 hydrolase from saccharomyces2 cerevisiae
42	d1quaa_	Alignment	not modelled	79.8	31	Fold: Zincin-like Superfamily: Metalloproteases ("zincins"), catalytic domain Family: Reprolysin-like
43	d1hova_	Alignment	not modelled	79.7	33	Fold: Zincin-like Superfamily: Metalloproteases ("zincins"), catalytic domain Family: Matrix metalloproteases, catalytic domain
44	c3mdjB_	Alignment	not modelled	79.7	13	PDB header: hydrolase/hydrolase inhibitor Chain: B: PDB Molecule: endoplasmic reticulum aminopeptidase 1; PDBTitle: er aminopeptidase, erap1, bound to the zinc aminopeptidase inhibitor,2 bestatin
45	c2jsdA_	Alignment	not modelled	79.6	36	PDB header: hydrolase Chain: A: PDB Molecule: matrix metalloproteinase-20; PDBTitle: solution structure of mmp20 complexed with nngh
46	c1slmA_	Alignment	not modelled	79.4	36	PDB header: hydrolase Chain: A: PDB Molecule: stromelysin-1; PDBTitle: crystal structure of fibroblast stromelysin-1: the c-truncated human2 proenzyme
47	d1q3aa_	Alignment	not modelled	79.4	43	Fold: Zincin-like Superfamily: Metalloproteases ("zincins"), catalytic domain Family: Matrix metalloproteases, catalytic domain
48	d1cgla_	Alignment	not modelled	78.6	43	Fold: Zincin-like Superfamily: Metalloproteases ("zincins"), catalytic domain Family: Matrix metalloproteases, catalytic domain
49	c2v4bB_	Alignment	not modelled	78.6	55	PDB header: hydrolase Chain: B: PDB Molecule: adams-1; PDBTitle: crystal structure of human adams-1 catalytic domain and2 cysteine-rich domain (apo-form)
50	d1kufa_	Alignment	not modelled	78.5	31	Fold: Zincin-like Superfamily: Metalloproteases ("zincins"), catalytic domain Family: Reprolysin-like
51	d1wnia_	Alignment	not modelled	78.3	38	Fold: Zincin-like Superfamily: Metalloproteases ("zincins"), catalytic domain Family: Reprolysin-like
52	c1z5hB_	Alignment	not modelled	78.0	13	PDB header: hydrolase Chain: B: PDB Molecule: tricorn protease interacting factor f3; PDBTitle: crystal structures of the tricorn interacting factor f32 from thermoplasma acidophilum
53	c3g5cA_	Alignment	not modelled	78.0	18	PDB header: membrane protein Chain: A: PDB Molecule: adam 22; PDBTitle: structural and biochemical studies on the ectodomain of human adam22
54	d1lmla_	Alignment	not modelled	77.8	22	Fold: Zincin-like Superfamily: Metalloproteases ("zincins"), catalytic domain Family: Leishmanolysin
						PDB header: hydrolase

55	c3b8zB	Alignment	not modelled	77.6	36	Chain: B: PDB Molecule: protein adams-5; PDBTitle: high resolution crystal structure of the catalytic domain2 of adams-5 (aggrecanase-2)
56	d1nd1a	Alignment	not modelled	77.4	45	Fold: Zincin-like Superfamily: Metalloproteases ("zincins"), catalytic domain Family: Reprolysin-like
57	d3b7sa3	Alignment	not modelled	76.8	21	Fold: Zincin-like Superfamily: Metalloproteases ("zincins"), catalytic domain Family: Leukotriene A4 hydrolase catalytic domain
58	d1eaka2	Alignment	not modelled	76.7	29	Fold: Zincin-like Superfamily: Metalloproteases ("zincins"), catalytic domain Family: Matrix metalloproteases, catalytic domain
59	d1fbla2	Alignment	not modelled	76.7	43	Fold: Zincin-like Superfamily: Metalloproteases ("zincins"), catalytic domain Family: Matrix metalloproteases, catalytic domain
60	d1bqba	Alignment	not modelled	76.6	18	Fold: Zincin-like Superfamily: Metalloproteases ("zincins"), catalytic domain Family: Thermolysin-like
61	d1kjpA	Alignment	not modelled	76.5	23	Fold: Zincin-like Superfamily: Metalloproteases ("zincins"), catalytic domain Family: Thermolysin-like
62	c2xdtA	Alignment	not modelled	75.2	13	PDB header: hydrolase Chain: A: PDB Molecule: endoplasmic reticulum aminopeptidase 1; PDBTitle: crystal structure of the soluble domain of human2 endoplasmic reticulum aminopeptidase 1 erap1
63	c2riqA	Alignment	not modelled	75.0	36	PDB header: hydrolase Chain: A: PDB Molecule: adams-5; PDBTitle: crystal structure of adams5 with inhibitor bound
64	c2rjpC	Alignment	not modelled	75.0	45	PDB header: hydrolase Chain: C: PDB Molecule: adams-4; PDBTitle: crystal structure of adams4 with inhibitor bound
65	c3se6A	Alignment	not modelled	74.6	15	PDB header: hydrolase Chain: A: PDB Molecule: endoplasmic reticulum aminopeptidase 2; PDBTitle: crystal structure of the human endoplasmic reticulum aminopeptidase 2
66	d1c7ka	Alignment	not modelled	74.5	55	Fold: Zincin-like Superfamily: Metalloproteases ("zincins"), catalytic domain Family: Zinc protease
67	c3ba0A	Alignment	not modelled	73.6	29	PDB header: hydrolase Chain: A: PDB Molecule: macrophage metalloelastase; PDBTitle: crystal structure of full-length human mmp-12
68	d3e11a1	Alignment	not modelled	73.5	19	Fold: Zincin-like Superfamily: Metalloproteases ("zincins"), catalytic domain Family: TTHA0227-like
69	d1npca	Alignment	not modelled	73.2	22	Fold: Zincin-like Superfamily: Metalloproteases ("zincins"), catalytic domain Family: Thermolysin-like
70	c1su3A	Alignment	not modelled	73.1	43	PDB header: hydrolase Chain: A: PDB Molecule: interstitial collagenase; PDBTitle: x-ray structure of human prommp-1: new insights into2 collagenase action
71	c3nqzB	Alignment	not modelled	72.9	50	PDB header: hydrolase Chain: B: PDB Molecule: secreted metalloprotease mcp02; PDBTitle: crystal structure of the autoprocessed vibriolysin mcp-02 with e369a2 mutation
72	c2qr4B	Alignment	not modelled	72.3	15	PDB header: hydrolase Chain: B: PDB Molecule: peptidase m3b, oligoendopeptidase f; PDBTitle: crystal structure of oligoendopeptidase-f from enterococcus faecium
73	d2ajfa1	Alignment	not modelled	72.2	25	Fold: Zincin-like Superfamily: Metalloproteases ("zincins"), catalytic domain Family: Neurolysin-like
74	c2h1jA	Alignment	not modelled	71.1	55	PDB header: hydrolase Chain: A: PDB Molecule: oligoendopeptidase f; PDBTitle: 3.1 a x-ray structure of putative oligoendopeptidase f: crystals grown2 by microfluidic seeding
75	c2vqxA	Alignment	not modelled	69.0	36	PDB header: hydrolase Chain: A: PDB Molecule: metalloproteinase; PDBTitle: precursor of protealysin, metalloproteinase from serratia2 proteamaculans.
76	c3ce2A	Alignment	not modelled	68.4	42	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: putative peptidase; PDBTitle: crystal structure of putative peptidase from chlamydomophila abortus
77	c1eakA	Alignment	not modelled	67.3	29	PDB header: hydrolase/hydrolase inhibitor Chain: A: PDB Molecule: 72 kda type iv collagenase; PDBTitle: catalytic domain of prommp-2 e404q mutant
78	c2xhqA	Alignment	not modelled	65.7	20	PDB header: hydrolase Chain: A: PDB Molecule: archaemetzincin; PDBTitle: crystal structure of archaemetzincin (amza) from archaeoglobus2 fulgidus at 1.45 a resolution
79	c1y791	Alignment	not modelled	65.1	45	PDB header: hydrolase Chain: 1: PDB Molecule: peptidyl-di-peptidase dcp; PDBTitle: crystal structure of the e.coli dipeptidyl carboxypeptidase2 dcp in complex with a peptidic inhibitor
80	c2j83B	Alignment	not modelled	65.0	36	PDB header: hydrolase Chain: B: PDB Molecule: ulilysin; PDBTitle: ulilysin metalloprotease in complex with batimastat.
81	d1eaka2	Alignment	not modelled	64.8	29	Fold: Zincin-like Superfamily: Metalloproteases ("zincins"), catalytic domain

81	d1sda2	Alignment	not modelled	64.8	49	Family: Serralsysin-like metalloprotease, catalytic (N-terminal) domain Fold: Zincin-like Superfamily: Metalloproteases ("zincins"), catalytic domain Family: Serralsysin-like metalloprotease, catalytic (N-terminal) domain
82	d1kapp2	Alignment	not modelled	64.0	36	Fold: Zincin-like Superfamily: Metalloproteases ("zincins"), catalytic domain Family: Serralsysin-like metalloprotease, catalytic (N-terminal) domain
83	d1k7ia2	Alignment	not modelled	63.2	22	Fold: Zincin-like Superfamily: Metalloproteases ("zincins"), catalytic domain Family: Serralsysin-like metalloprotease, catalytic (N-terminal) domain
84	d1g9ka2	Alignment	not modelled	63.2	45	Fold: Zincin-like Superfamily: Metalloproteases ("zincins"), catalytic domain Family: Serralsysin-like metalloprotease, catalytic (N-terminal) domain
85	d1s4bp	Alignment	not modelled	60.8	42	Fold: Zincin-like Superfamily: Metalloproteases ("zincins"), catalytic domain Family: Neurolysin-like
86	d1i1ip	Alignment	not modelled	57.8	42	Fold: Zincin-like Superfamily: Metalloproteases ("zincins"), catalytic domain Family: Neurolysin-like
87	c2c6nA	Alignment	not modelled	50.6	36	PDB header: hydrolase/hydrolase inhibitor Chain: A: PDB Molecule: angiotensin-converting enzyme, somatic isoform; PDBTitle: structure of human somatic angiotensin-i converting enzyme n domain2 with lisinopril
88	c1jiwP	Alignment	not modelled	50.1	54	PDB header: hydrolase/hyrolase inhibitor Chain: P: PDB Molecule: alkaline metalloproteinase; PDBTitle: crystal structure of the apr-aprin complex
89	c1l6jA	Alignment	not modelled	49.5	36	PDB header: hydrolase Chain: A: PDB Molecule: matrix metalloproteinase-9; PDBTitle: crystal structure of human matrix metalloproteinase mmp92 (gelatinase b).
90	c3b4rB	Alignment	not modelled	48.8	50	PDB header: hydrolase Chain: B: PDB Molecule: putative zinc metalloprotease mj0392; PDBTitle: site-2 protease from methanocaldococcus jannaschii
91	c3zukB	Alignment	not modelled	48.8	32	PDB header: hydrolase/inhibitor Chain: B: PDB Molecule: endopeptidase, peptidase family m13; PDBTitle: crystal structure of mycobacterium tuberculosis zinc metalloprotease2 zmp1 in complex with inhibitor
92	d1k9xa	Alignment	not modelled	48.1	10	Fold: Zincin-like Superfamily: Metalloproteases ("zincins"), catalytic domain Family: Neurolysin-like
93	c3lqbA	Alignment	not modelled	47.8	38	PDB header: hydrolase Chain: A: PDB Molecule: loc792177 protein; PDBTitle: crystal structure of the hatching enzyme zhe1 from the zebrafish danio2 rerio
94	c3dwbA	Alignment	not modelled	45.3	27	PDB header: hydrolase Chain: A: PDB Molecule: endothelin-converting enzyme 1; PDBTitle: structure of human ece-1 complexed with phosphoramidon
95	d1j36a	Alignment	not modelled	44.4	45	Fold: Zincin-like Superfamily: Metalloproteases ("zincins"), catalytic domain Family: Neurolysin-like
96	c2x3bB	Alignment	not modelled	44.2	13	PDB header: hydrolase Chain: B: PDB Molecule: toxic extracellular endopeptidase; PDBTitle: asap1 inactive mutant e294a, an extracellular toxic zinc2 metalloendopeptidase
97	d1asta	Alignment	not modelled	43.9	42	Fold: Zincin-like Superfamily: Metalloproteases ("zincins"), catalytic domain Family: Astacin
98	c3edhA	Alignment	not modelled	43.1	54	PDB header: hydrolase Chain: A: PDB Molecule: bone morphogenetic protein 1; PDBTitle: crystal structure of bone morphogenetic protein 1 protease2 domain in complex with partially bound dmso
99	c1gxdA	Alignment	not modelled	41.6	29	PDB header: hydrolase Chain: A: PDB Molecule: 72 kda type iv collagenase; PDBTitle: prommp-2/timp-2 complex
100	c1om8A	Alignment	not modelled	41.2	50	PDB header: hydrolase Chain: A: PDB Molecule: serralsysin; PDBTitle: crystal structure of a cold adapted alkaline protease from pseudomonas2 tac ii 18, co-crystallized with 10 mm edta
101	c3lq0A	Alignment	not modelled	39.0	33	PDB header: hydrolase Chain: A: PDB Molecule: proastacin; PDBTitle: zymogen structure of crayfish astacin metallopeptidase
102	c2l0rA	Alignment	not modelled	38.2	40	PDB header: hydrolase,toxin Chain: A: PDB Molecule: lethal factor; PDBTitle: conformational dynamics of the anthrax lethal factor catalytic center
103	d1dmta	Alignment	not modelled	33.3	23	Fold: Zincin-like Superfamily: Metalloproteases ("zincins"), catalytic domain Family: Neutral endopeptidase (neprilysin)
104	d1uzea	Alignment	not modelled	31.6	45	Fold: Zincin-like Superfamily: Metalloproteases ("zincins"), catalytic domain Family: Neurolysin-like
105	d1saza1	Alignment	not modelled	31.4	17	Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: Acetokinase-like
106	d1j7na2	Alignment	not modelled	27.7	29	Fold: Zincin-like Superfamily: Metalloproteases ("zincins"), catalytic domain Family: Anthrax toxin lethal factor, N- and C-terminal domains
107	d2di4a1	Alignment	not modelled	26.2	33	Fold: FtsH protease domain-like Superfamily: FtsH protease domain-like Family: FtsH protease domain-like

108	c1wgzC	<div><div></div><div>Alignment</div></div>	not modelled	25.2	21	PDB header: hydrolase Chain: C: PDB Molecule: carboxypeptidase 1; PDBTitle: crystal structure of carboxypeptidase 1 from thermus thermophilus
109	d2ce7a1	<div><div></div><div>Alignment</div></div>	not modelled	23.6	28	Fold: FtsH protease domain-like Superfamily: FtsH protease domain-like Family: FtsH protease domain-like
110	d1np3a1	<div><div></div><div>Alignment</div></div>	not modelled	23.0	29	Fold: 6-phosphogluconate dehydrogenase C-terminal domain-like Superfamily: 6-phosphogluconate dehydrogenase C-terminal domain-like Family: Acetohydroxy acid isomeroeductase (ketol-acid reductoisomerase, KARI)