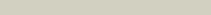
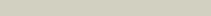
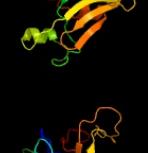


Phyre²

Email	mdejesus@rockefeller.edu
Description	RVBD1268c_(-)_1417664_1418362
Date	Wed Jul 31 22:05:36 BST 2019
Unique Job ID	acc68a3920bf75b2

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c3ervA			99.7	19	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: putative c39-like peptidase; PDBTitle: crystal structure of a putative c39-like peptidase from bacillus2 anthracis
2	c6mpzA			99.1	20	PDB header: transport protein Chain: A: PDB Molecule: double glycine motif protease domain from ams/pcat PDBTitle: crystal structure of a double glycine motif protease from ams/pcat2 transporter in complex with the leader peptide
3	c3k8uA			99.1	22	PDB header: hydrolase Chain: A: PDB Molecule: putative abc transporter, atp-binding protein coma; PDBTitle: crystal structure of the peptidase domain of streptococcus coma, a bi-2 functional abc transporter involved in quorum sensing pathway
4	c3zuA			98.4	12	PDB header: hydrolase Chain: A: PDB Molecule: alpha-hemolysin translocation atp-binding protein hlyb; PDBTitle: a c39-like domain
5	c4ry2A			97.8	23	PDB header: transport protein/hydrolase Chain: A: PDB Molecule: abc-type bacteriocin transporter; PDBTitle: crystal structure of the peptidase-containing abc transporter pcat1
6	d2bu3a1			97.8	16	Fold: Cysteine proteinases Superfamily: Cysteine proteinases Family: Phytocelatin synthase
7	d1cv8a			97.5	15	Fold: Cysteine proteinases Superfamily: Cysteine proteinases Family: Papain-like
8	c2btwA			97.2	18	PDB header: transferase Chain: A: PDB Molecule: alr0975 protein; PDBTitle: crystal structure of alr0975
9	c3b79A			97.2	19	PDB header: nucleotide binding protein Chain: A: PDB Molecule: toxin secretion atp-binding protein; PDBTitle: crystal structure of the n-terminal peptidase c39 like2 domain of the toxin secretion atp-binding protein from3 vibrio parahaemolyticus
10	c2c0yA			96.8	14	PDB header: hydrolase Chain: A: PDB Molecule: procathepsin s; PDBTitle: the crystal structure of a cys25ala mutant of human procathepsin s
11	d7pcka			96.6	20	Fold: Cysteine proteinases Superfamily: Cysteine proteinases Family: Papain-like

12	c3qt4A_	Alignment		96.5	19	PDB header: hydrolase Chain: A: PDB Molecule: cathepsin-I-like midgut cysteine proteinase; PDBTitle: structure of digestive procathepsin I 3 of tenebrio molitor larval2 midgut
13	c3qj3B_	Alignment		96.3	18	PDB header: hydrolase Chain: B: PDB Molecule: cathepsin I-like protein; PDBTitle: structure of digestive procathepsin I2 proteinase from tenebrio2 molitor larval midgut
14	c2o6xA_	Alignment		96.2	19	PDB header: hydrolase Chain: A: PDB Molecule: secreted cathepsin I 1; PDBTitle: crystal structure of procathepsin I1 from fasciola hepatica
15	d1vsna1	Alignment		96.1	18	Fold: Cysteine proteinases Superfamily: Cysteine proteinases Family: Papain-like
16	c3hh1B_	Alignment		95.9	20	PDB header: hydrolase Chain: B: PDB Molecule: cathepsin b-like cysteine protease; PDBTitle: crystal structure of cathepsin b from t. brucei in complex with ca074
17	c6hqzB_	Alignment		95.9	20	PDB header: hydrolase Chain: B: PDB Molecule: avrrpt2; PDBTitle: crystal structure of the type iii effector protein avrrpt2 from2 erwinia amylovora, a c70 family cysteine protease
18	d3pbha_	Alignment		95.9	18	Fold: Cysteine proteinases Superfamily: Cysteine proteinases Family: Papain-like
19	d1cs8a_	Alignment		95.6	18	Fold: Cysteine proteinases Superfamily: Cysteine proteinases Family: Papain-like
20	c6czkA_	Alignment		95.4	15	PDB header: hydrolase Chain: A: PDB Molecule: pro-cathepsin h; PDBTitle: crystal structure of wild-type human pro-cathepsin h
21	c3bwkD_	Alignment	not modelled	95.2	17	PDB header: hydrolase Chain: D: PDB Molecule: cysteine protease falcipain-3; PDBTitle: crystal structure of falcipain-3 with its inhibitor, k11017
22	d1mira_	Alignment	not modelled	94.9	15	Fold: Cysteine proteinases Superfamily: Cysteine proteinases Family: Papain-like
23	d2r6na1	Alignment	not modelled	94.8	20	Fold: Cysteine proteinases Superfamily: Cysteine proteinases Family: Papain-like
24	c1icfA_	Alignment	not modelled	94.8	16	PDB header: hydrolase Chain: A: PDB Molecule: protein (cathepsin I: heavy chain); PDBTitle: crystal structure of mhc class ii associated p41 ii fragment in2 complex with cathepsin I
25	d1me4a_	Alignment	not modelled	94.4	18	Fold: Cysteine proteinases Superfamily: Cysteine proteinases Family: Papain-like
26	d2h7ja1	Alignment	not modelled	94.4	14	Fold: Cysteine proteinases Superfamily: Cysteine proteinases Family: Papain-like
27	c1jqpA_	Alignment	not modelled	94.3	16	PDB header: hydrolase Chain: A: PDB Molecule: dipeptidyl peptidase i; PDBTitle: dipeptidyl peptidase i (cathepsin c), a tetrameric cysteine protease2 of the papain family
28	d1fh0a_	Alignment	not modelled	94.3	21	Fold: Cysteine proteinases Superfamily: Cysteine proteinases Family: Papain-like
29	d1gmya	Alignment	not modelled	94.2	22	Fold: Cysteine proteinases Superfamily: Cysteine proteinases Family: Papain-like

30	c4yywA	Alignment	not modelled	94.0	16	PDB header: hydrolase Chain: A: PDB Molecule: ficin isoform d; PDBTitle: ficin d2
31	c6a0qA	Alignment	not modelled	93.6	16	PDB header: hydrolase Chain: A: PDB Molecule: lpg2622; PDBTitle: the crystal structure of lpg2622_e64 complex
32	c3ch3X	Alignment	not modelled	93.4	15	PDB header: hydrolase Chain: X: PDB Molecule: serine-repeat antigen protein; PDBTitle: crystal structure analysis of sera5e from plasmodium falciparum
33	c4ci7A	Alignment	not modelled	93.3	14	PDB header: hydrolase Chain: A: PDB Molecule: cell surface protein (putative cell surface-associated PDBTitle: the crystal structure of the cysteine protease and lectin-like2 domains of cwp84, a surface layer associated protein of clostridium3 difficile
34	d1deua	Alignment	not modelled	93.2	15	Fold: Cysteine proteinases Superfamily: Cysteine proteinases Family: Papain-like
35	c2b1nA	Alignment	not modelled	93.2	20	PDB header: sugar binding protein Chain: A: PDB Molecule: spe31; PDBTitle: crystal structure of a papain-fold protein without the catalytic2 cysteine from seeds of pachyrhizus erosus
36	d1cqda	Alignment	not modelled	92.7	15	Fold: Cysteine proteinases Superfamily: Cysteine proteinases Family: Papain-like
37	c5fpwC	Alignment	not modelled	92.7	18	PDB header: hydrolase Chain: C: PDB Molecule: pro cathepsin b s9; PDBTitle: procathepsin b s9 from trypanosoma congolense
38	c4hwya	Alignment	not modelled	92.4	19	PDB header: hydrolase Chain: A: PDB Molecule: cysteine peptidase c (cpc); PDBTitle: trypanosoma brucei procathepsin b solved from 40 fs free-electron2 laser pulse data by serial femtosecond x-ray crystallography
39	d1dkia	Alignment	not modelled	92.2	20	Fold: Cysteine proteinases Superfamily: Cysteine proteinases Family: Papain-like
40	c1csbE	Alignment	not modelled	91.8	18	PDB header: hydrolase/hydrolase inhibitor Chain: E: PDB Molecule: cathepsin b heavy chain; PDBTitle: crystal structure of cathepsin b inhibited with ca030 at 2.1 angstroms2 resolution: a basis for the design of specific epoxysuccinyl3 inhibitors
41	d1m6da	Alignment	not modelled	91.7	18	Fold: Cysteine proteinases Superfamily: Cysteine proteinases Family: Papain-like
42	c3bbab	Alignment	not modelled	91.6	33	PDB header: hydrolase Chain: B: PDB Molecule: interpain a; PDBTitle: structure of active wild-type prevotella intermedia interpain a2 cysteine protease
43	c2jtcA	Alignment	not modelled	91.5	20	PDB header: hydrolase Chain: A: PDB Molecule: streptopain; PDBTitle: 3d structure and backbone dynamics of spe b
44	c3oisA	Alignment	not modelled	91.5	23	PDB header: hydrolase Chain: A: PDB Molecule: cysteine protease; PDBTitle: crystal structure xylellain, a cysteine protease from xylella2 fastidiosa
45	d1ef7a	Alignment	not modelled	91.3	19	Fold: Cysteine proteinases Superfamily: Cysteine proteinases Family: Papain-like
46	d1pvja	Alignment	not modelled	90.7	20	Fold: Cysteine proteinases Superfamily: Cysteine proteinases Family: Papain-like
47	c1nb3D	Alignment	not modelled	90.7	17	PDB header: hydrolase Chain: D: PDB Molecule: cathepsin h; PDBTitle: crystal structure of stefin a in complex with cathepsin h: n-terminal2 residues of inhibitors can adapt to the active sites of endo-and3 exopeptidases
48	c3bb7A	Alignment	not modelled	89.8	27	PDB header: hydrolase Chain: A: PDB Molecule: interpain a; PDBTitle: structure of prevotella intermedia prointerpain a fragment 39-3592 (mutant c154a)
49	d1iqpa2	Alignment	not modelled	89.8	13	Fold: Cysteine proteinases Superfamily: Cysteine proteinases Family: Papain-like
50	d2dcca1	Alignment	not modelled	87.8	17	Fold: Cysteine proteinases Superfamily: Cysteine proteinases Family: Papain-like
51	c3gsdA	Alignment	not modelled	87.7	15	PDB header: hydrolase/hydrolase inhibitor Chain: A: PDB Molecule: cathepsin b-like peptidase (c01 family); PDBTitle: structure of cathepsin b1 from schistosoma mansoni in complex with2 ca074 inhibitor
52	c5jt8B	Alignment	not modelled	86.8	17	PDB header: allergen Chain: B: PDB Molecule: blo t 1 allergen; PDBTitle: structural basis for the limited antibody cross reactivity between the2 mite allergens blo t 1 and der p 1
53	d1thea	Alignment	not modelled	85.8	17	Fold: Cysteine proteinases Superfamily: Cysteine proteinases Family: Papain-like
54	d1ppoa	Alignment	not modelled	85.5	13	Fold: Cysteine proteinases Superfamily: Cysteine proteinases Family: Papain-like
55	c3tva	Alignment	not modelled	84.0	10	PDB header: hydrolase Chain: A: PDB Molecule: papain;

55	c3uua	Alignment	not modelled	84.0	17	PDBTitle: structure of the precursor of a thermostable variant of papain at 2.62 angstroem resolution
56	c1y4hA	Alignment	not modelled	84.0	16	PDB header: hydrolase/hydrolase inhibitor Chain: A: PDB Molecule: cysteine protease; PDBTitle: wild type staphopain-staphostatin complex
57	d1o0ea	Alignment	not modelled	83.2	14	Fold: Cysteine proteinases Superfamily: Cysteine proteinases Family: Papain-like
58	d1gece	Alignment	not modelled	79.5	16	Fold: Cysteine proteinases Superfamily: Cysteine proteinases Family: Papain-like
59	c3hwnC	Alignment	not modelled	79.5	21	PDB header: hydrolase Chain: C: PDB Molecule: cathepsin I1; PDBTitle: cathepsin I with az13010160
60	d1iwda	Alignment	not modelled	77.6	18	Fold: Cysteine proteinases Superfamily: Cysteine proteinases Family: Papain-like
61	d2acta	Alignment	not modelled	75.9	16	Fold: Cysteine proteinases Superfamily: Cysteine proteinases Family: Papain-like
62	d2as8a1	Alignment	not modelled	73.7	22	Fold: Cysteine proteinases Superfamily: Cysteine proteinases Family: Papain-like
63	d2oula1	Alignment	not modelled	73.2	16	Fold: Cysteine proteinases Superfamily: Cysteine proteinases Family: Papain-like
64	c1x9yD	Alignment	not modelled	72.7	13	PDB header: hydrolase Chain: D: PDB Molecule: cysteine proteinase; PDBTitle: the prostaphopain b structure
65	c5ef4A	Alignment	not modelled	72.6	15	PDB header: allergen Chain: A: PDB Molecule: cysteine protease; PDBTitle: 2.05 a crystal structure of the amb a 11 cysteine protease, a major ragweed pollen allergen, in its proform
66	d1pcia	Alignment	not modelled	70.5	17	Fold: Cysteine proteinases Superfamily: Cysteine proteinases Family: Papain-like
67	d1aecA	Alignment	not modelled	68.3	20	Fold: Cysteine proteinases Superfamily: Cysteine proteinases Family: Papain-like
68	c5a24A	Alignment	not modelled	54.3	21	PDB header: hydrolase Chain: A: PDB Molecule: dionain-1; PDBTitle: crystal structure of dionain-1, the major endopeptidase in2 the venus flytrap digestive juice
69	c3pw3E	Alignment	not modelled	49.2	13	PDB header: hydrolase Chain: E: PDB Molecule: aminopeptidase c; PDBTitle: crystal structure of a cysteine protease (bdi_2249) from2 parabacteroides distasonis atcc 8503 at 2.23 a resolution
70	d1pxva	Alignment	not modelled	49.0	14	Fold: Cysteine proteinases Superfamily: Cysteine proteinases Family: Papain-like
71	c3f55A	Alignment	not modelled	47.7	17	PDB header: hydrolase, allergen Chain: A: PDB Molecule: beta-1,3-glucanase; PDBTitle: crystal structure of the native endo beta-1,3-glucanase (hev b 2), a2 major allergen from hevea brasiliensis (space group p41)
72	c5t1oB	Alignment	not modelled	45.8	22	PDB header: transferase Chain: B: PDB Molecule: phosphoenolpyruvate-protein phosphotransferase ptsP; PDBTitle: solution-state nmr and saxs structural ensemble of npr (1-85) in2 complex with ein-ntr (170-424)
73	c3f75A	Alignment	not modelled	45.5	19	PDB header: hydrolase Chain: A: PDB Molecule: cathepsin l protease; PDBTitle: activated toxoplasma gondii cathepsin l (tgcpl) in complex with its2 propeptide
74	d1ghsa	Alignment	not modelled	44.4	24	Fold: TIM beta/alpha-barrel Superfamily: (Trans)glycosidases Family: beta-glycanases
75	d1khqa	Alignment	not modelled	43.8	19	Fold: Cysteine proteinases Superfamily: Cysteine proteinases Family: Papain-like
76	c2bdzA	Alignment	not modelled	42.9	14	PDB header: hydrolase Chain: A: PDB Molecule: mexicain; PDBTitle: mexicain from jacarata mexicana
77	c4yyqA	Alignment	not modelled	42.5	18	PDB header: hydrolase Chain: A: PDB Molecule: ficin isoform a; PDBTitle: ficin a
78	d3gcba	Alignment	not modelled	40.7	18	Fold: Cysteine proteinases Superfamily: Cysteine proteinases Family: Papain-like
79	d1vbga2	Alignment	not modelled	40.7	23	Fold: The "swivelling" beta/beta/alpha domain Superfamily: Phosphohistidine domain Family: Pyruvate phosphate dikinase, central domain
80	d1s4va	Alignment	not modelled	39.3	14	Fold: Cysteine proteinases Superfamily: Cysteine proteinases Family: Papain-like
81	d1cmxa	Alignment	not modelled	37.0	13	Fold: Cysteine proteinases Superfamily: Cysteine proteinases Family: Ubiquitin carboxyl-terminal hydrolase UCH-L
						Fold: TIM beta/alpha-barrel

82	d2cygA1	Alignment	not modelled	36.4	15	Superfamily: (Trans)glycosidases Family: beta-glycanases
83	c6mirA	Alignment	not modelled	35.5	20	PDB header: hydrolase Chain: A: PDB Molecule: ananain; PDBTitle: native ananain from ananas comosus
84	c5egwA	Alignment	not modelled	35.3	15	PDB header: allergen Chain: A: PDB Molecule: cysteine protease; PDBTitle: 2.70 a crystal structure of the amb a 11 cysteine protease, a major ragweed pollen allergen, in its proform
85	c5msmD	Alignment	not modelled	35.2	18	PDB header: cell cycle Chain: D: PDB Molecule: sister chromatid cohesion protein dcc1; PDBTitle: structure of the dcc1-ctf8-ctf18c trimer
86	d1yala	Alignment	not modelled	35.1	17	Fold: Cysteine proteinases Superfamily: Cysteine proteinases Family: Papain-like
87	d2eta1	Alignment	not modelled	34.3	13	Fold: Cysteine proteinases Superfamily: Cysteine proteinases Family: Ubiquitin carboxyl-terminal hydrolase UCH-L
88	c5msnA	Alignment	not modelled	34.0	18	PDB header: cell cycle Chain: A: PDB Molecule: dcc1 protein; PDBTitle: structure of the dcc1 protein
89	c3a7sA	Alignment	not modelled	32.2	7	PDB header: hydrolase Chain: A: PDB Molecule: ubiquitin carboxyl-terminal hydrolase isozyme I5; PDBTitle: catalytic domain of uch37
90	c3ffvA	Alignment	not modelled	32.1	20	PDB header: protein binding Chain: A: PDB Molecule: protein syd; PDBTitle: crystal structure analysis of syd
91	c3qfwB	Alignment	not modelled	30.1	26	PDB header: lyase Chain: B: PDB Molecule: ribulose-1,5-bisphosphate carboxylase/oxygenase large PDBTitle: crystal structure of rubisco-like protein from rhodopseudomonas2 palustris
92	c4ig7A	Alignment	not modelled	29.6	11	PDB header: hydrolase/signaling protein Chain: A: PDB Molecule: ubiquitin c-terminal hydrolase 37; PDBTitle: crystal structure of trichinella spiralis uch37 bound to ubiquitin2 vinyl methyl ester
93	d1qo2a	Alignment	not modelled	29.1	16	Fold: TIM beta/alpha-barrel Superfamily: Ribulose-phoshate binding barrel Family: Histidine biosynthesis enzymes
94	d1xd3a	Alignment	not modelled	28.8	20	Fold: Cysteine proteinases Superfamily: Cysteine proteinases Family: Ubiquitin carboxyl-terminal hydrolase UCH-L
95	c2wdtA	Alignment	not modelled	28.3	11	PDB header: hydrolase/protein binding Chain: A: PDB Molecule: ubiquitin carboxyl-terminal hydrolase I3; PDBTitle: crystal structure of plasmodium falciparum uchl3 in complex2 with the suicide inhibitor ubvme
96	d1euza2	Alignment	not modelled	27.3	18	Fold: Aminoacid dehydrogenase-like, N-terminal domain Superfamily: Aminoacid dehydrogenase-like, N-terminal domain Family: Aminoacid dehydrogenases
97	d1e9yb2	Alignment	not modelled	27.1	20	Fold: TIM beta/alpha-barrel Superfamily: Metallo-dependent hydrolases Family: alpha-subunit of urease, catalytic domain
98	c2r8rb	Alignment	not modelled	26.8	14	PDB header: transferase Chain: B: PDB Molecule: sensor protein; PDBTitle: crystal structure of the n-terminal region (19..243) of sensor protein2 kdpd from pseudomonas syringae pv. tomato str. dc3000
99	d1ejxc2	Alignment	not modelled	26.8	14	Fold: TIM beta/alpha-barrel Superfamily: Metallo-dependent hydrolases Family: alpha-subunit of urease, catalytic domain
100	c6cgaC	Alignment	not modelled	26.4	11	PDB header: hydrolase Chain: C: PDB Molecule: ubiquitin carboxyl-terminal hydrolase calypso; PDBTitle: structure of the pr-dub complex
101	d1l0oc	Alignment	not modelled	25.2	24	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Sigma3 and sigma4 domains of RNA polymerase sigma factors Family: Sigma4 domain
102	c1l0oC	Alignment	not modelled	25.2	24	PDB header: protein binding Chain: C: PDB Molecule: sigma factor; PDBTitle: crystal structure of the bacillus stearothermophilus anti-2 sigma factor spoIab with the sporulation sigma factor3 sigmaf
103	c4zhjA	Alignment	not modelled	24.2	13	PDB header: metal binding protein Chain: A: PDB Molecule: mg-chelatase subunit chlh; PDBTitle: crystal structure of the catalytic subunit of magnesium chelatase
104	c3ihrA	Alignment	not modelled	24.2	9	PDB header: hydrolase Chain: A: PDB Molecule: ubiquitin carboxyl-terminal hydrolase isozyme I5; PDBTitle: crystal structure of uch37
105	c1v9IA	Alignment	not modelled	23.4	25	PDB header: oxidoreductase Chain: A: PDB Molecule: glutamate dehydrogenase; PDBTitle: l-glutamate dehydrogenase from pyrobaculum islandicum2 complexed with nad
106	c1kblA	Alignment	not modelled	23.2	21	PDB header: transferase Chain: A: PDB Molecule: pyruvate phosphate dikinase; PDBTitle: pyruvate phosphate dikinase
107	d1aq0a	Alignment	not modelled	23.1	17	Fold: TIM beta/alpha-barrel Superfamily: (Trans)glycosidases Family: beta-glycanases
						PDB header: ribosome Chain: N: PDB Molecule: 40s ribosomal protein s13;

108	c3u5cN_	Alignment	not modelled	22.4	38	PDBTitle: the structure of the eukaryotic ribosome at 3.0 Å resolution. This entry contains proteins of the 40S subunit, ribosome a
109	c1hrdA_	Alignment	not modelled	21.8	23	PDB header: oxidoreductase Chain: A; PDB Molecule: glutamate dehydrogenase; PDBTitle: glutamate dehydrogenase