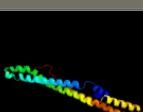
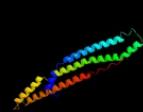
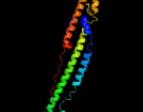
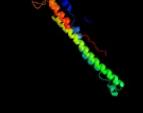
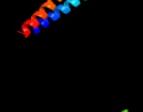
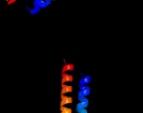
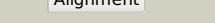
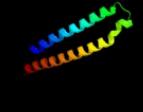
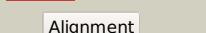
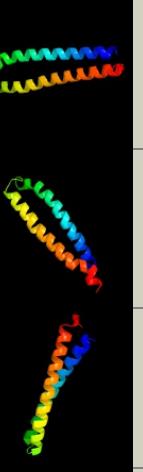
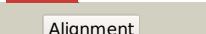
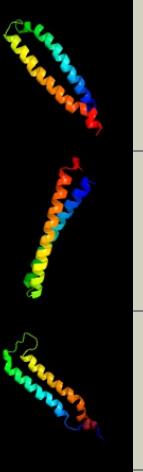
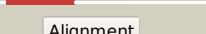
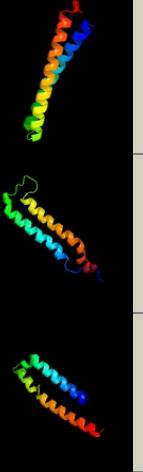
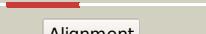
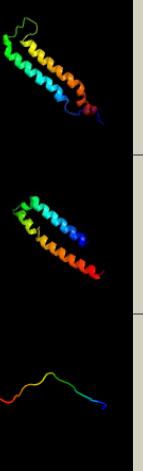
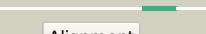
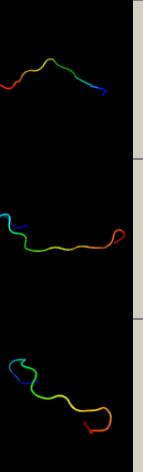
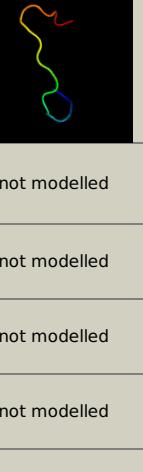
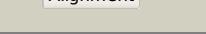
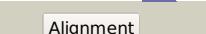
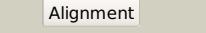
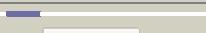
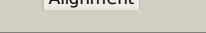


Phyre²

Email	mdejesus@rockefeller.edu
Description	RVBD2108_(PPE36)_2367719_2368450
Date	Mon Aug 5 13:25:22 BST 2019
Unique Job ID	c64a468eafe6288b

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c5xfsB_			100.0	43	PDB header: protein transport Chain: B; PDB Molecule: ppe family protein ppe15; PDBTitle: crystal structure of pe8-ppe15 in complex with espG5 from m.2 tuberculosis
2	c2g38B_			100.0	34	PDB header: structural genomics, unknown function Chain: B; PDB Molecule: ppe family protein; PDBTitle: a pe/ppe protein complex from mycobacterium tuberculosis
3	d2g38b1			100.0	34	Fold: Ferritin-like Superfamily: PE/PPE dimer-like Family: PPE
4	c4xy3A_			100.0	16	PDB header: protein transport Chain: A; PDB Molecule: esx-1 secretion-associated protein espB; PDBTitle: structure of esx-1 secreted protein espB
5	c4wj2A_			98.5	15	PDB header: unknown function Chain: A; PDB Molecule: antigen mtb48; PDBTitle: mycobacterial protein
6	c2vs0B_			97.9	16	PDB header: cell invasion Chain: B; PDB Molecule: virulence factor esxa; PDBTitle: structural analysis of homodimeric staphylococcal aureus2 virulence factor esxa
7	c3gvmA_			97.8	18	PDB header: viral protein Chain: A; PDB Molecule: putative uncharacterized protein sag1039; PDBTitle: structure of the homodimeric wxx-100 family protein from streptococcus2 agalactiae
8	c4iogD_			97.7	12	PDB header: unknown function Chain: D; PDB Molecule: secreted protein esxB; PDBTitle: the crystal structure of a secreted protein esxB (wild-type, in p212 space group) from bacillus anthracis str. Sterne
9	c3zbhC_			97.6	23	PDB header: unknown function Chain: C; PDB Molecule: esxa; PDBTitle: geobacillus thermonitratificans esxa crystal form I
10	d1wa8a1			96.9	12	Fold: Ferritin-like Superfamily: ExxAB dimer-like Family: ESAT-6 like
11	c4lwsA_			96.5	19	PDB header: unknown function Chain: A; PDB Molecule: uncharacterized protein; PDBTitle: esxa : esxB (semet) hetero-dimer from thermomonospora curvata

12	c4lwsB_			96.2	13	PDB header: unknown function Chain: B: PDB Molecule: uncharacterized protein; PDBTitle: esxa : esxb (semet) hetero-dimer from thermomonospora curvata
13	d1wa8b1			96.0	17	Fold: Ferritin-like Superfamily: EsxA B dimer-like Family: ESAT-6 like
14	c4i0xA_			95.4	16	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: esat-6-like protein mab_3112; PDBTitle: crystal structure of the mycobacterium abscessus esxef (mab_3112-2 mab_3113) complex
15	c2kg7B_			91.4	13	PDB header: unknown function Chain: B: PDB Molecule: esat-6-like protein esxh; PDBTitle: structure and features of the complex formed by the tuberculosis2 virulence factors rv0287 and rv0288
16	c4i0xL_			75.3	19	PDB header: structural genomics, unknown function Chain: J: PDB Molecule: esat-6-like protein mab_3113; PDBTitle: crystal structure of the mycobacterium abscessus esxef (mab_3112-2 mab_3113) complex
17	c3txaA_			44.7	57	PDB header: cell adhesion Chain: A: PDB Molecule: cell wall surface anchor family protein; PDBTitle: structural analysis of adhesive tip pilin, gbs104 from group b2 streptococcus agalactiae
18	d1zyea1			20.5	18	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
19	d2f8aa1			19.8	18	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
20	d1gp1a_			17.1	17	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
21	c3drnB_		not modelled	16.9	38	PDB header: oxidoreductase Chain: B: PDB Molecule: peroxiredoxin, bacterioferritin comigratory protein PDBTitle: the crystal structure of bcp1 from sulfolobus sulfataricus
22	d1st9a_		not modelled	16.8	31	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
23	d1jfma_		not modelled	16.6	14	Fold: MHC antigen-recognition domain Superfamily: MHC antigen-recognition domain Family: MHC antigen-recognition domain
24	c1bkvA_		not modelled	16.4	50	PDB header: structural protein Chain: A: PDB Molecule: t3-785; PDBTitle: collagen
25	c1bkvC_		not modelled	15.4	50	PDB header: structural protein Chain: C: PDB Molecule: t3-785; PDBTitle: collagen
26	c1bkvB_		not modelled	15.4	50	PDB header: structural protein Chain: B: PDB Molecule: t3-785; PDBTitle: collagen
27	c2p5qA_		not modelled	15.2	22	PDB header: oxidoreductase Chain: A: PDB Molecule: glutathione peroxidase 5; PDBTitle: crystal structure of the poplar glutathione peroxidase 5 in the2 reduced form
28	c3tw0D_		not modelled	14.8	33	PDB header: cell adhesion Chain: D: PDB Molecule: cell wall surface anchor family protein; PDBTitle: structural analysis of adhesive tip pilin, gbs104 from group b2 streptococcus agalactiae PDB header: oxidoreductase Chain: B: PDB Molecule: alkyl hydroperoxide reductase/ thiol

29	c5enuB	Alignment	not modelled	13.8	25	PDB header: specific antioxidant/ PDBTitle: crystal structure of an alkyl hydroperoxide reductase from burkholderia2 ambifaria
30	c2n5uA	Alignment	not modelled	13.4	21	PDB header: photosynthesis Chain: A: PDB Molecule: tsr0524 protein; PDBTitle: solution structure of the cyanobacterial cytochrome b6f complex2 subunit petp
31	c3lorB	Alignment	not modelled	13.3	38	PDB header: isomerase Chain: B: PDB Molecule: thiol-disulfide isomerase and thioredoxins; PDBTitle: the crystal structure of a thiol-disulfide isomerase from2 corynebacterium glutamicum to 2.2a
32	c2hyxA	Alignment	not modelled	12.1	33	PDB header: unknown function Chain: A: PDB Molecule: protein dipz; PDBTitle: structure of the c-terminal domain of dipz from mycobacterium2 tuberculosis
33	c2v1mA	Alignment	not modelled	11.9	25	PDB header: oxidoreductase Chain: A: PDB Molecule: glutathione peroxidase; PDBTitle: crystal structure of schistosoma mansoni glutathione peroxidase
34	c4ka0C	Alignment	not modelled	11.5	29	PDB header: oxidoreductase Chain: C: PDB Molecule: putative thiol-disulfide oxidoreductase; PDBTitle: crystal structure of a putative thiol-disulfide oxidoreductase from2 bacteroides vulgatus (target nysgrc-011676), space group p21221
35	c2wpyA	Alignment	not modelled	11.4	50	PDB header: transcription Chain: A: PDB Molecule: general control protein gcn4; PDBTitle: gcn4 leucine zipper mutant with one vxnxxxx motif2 coordinating chloride
36	d1qxha	Alignment	not modelled	10.9	9	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
37	c3pmDA	Alignment	not modelled	10.8	29	PDB header: lipid binding protein Chain: A: PDB Molecule: conserved domain protein; PDBTitle: crystal structure of the sporulation inhibitor pxo1-118 from bacillus2 anthracis
38	c2yp6A	Alignment	not modelled	10.7	24	PDB header: oxidoreductase Chain: A: PDB Molecule: thioredoxin family protein; PDBTitle: crystal structure of the pneumococcal exposed lipoprotein2 thioredoxin sp_1000 (etr2) from streptococcus pneumoniae3 strain tigr4 in complex with cyclofus 3 tm
39	c3eytA	Alignment	not modelled	10.4	31	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein spa0173; PDBTitle: crystal structure of thioredoxin-like superfamily protein spa0173
40	c2h66G	Alignment	not modelled	10.4	12	PDB header: structural genomics/oxidoreductase Chain: G: PDB Molecule: pv-pf14_0368; PDBTitle: the crystal structure of plasmodium vivax 2-cys2 peroxiredoxin
41	c3mp6A	Alignment	not modelled	10.3	53	PDB header: histone binding protein Chain: A: PDB Molecule: maltose-binding periplasmic protein,linker,saga-associated PDBTitle: complex structure of sgf29 and dimethylated h3k4
42	c4g7xB	Alignment	not modelled	10.2	17	PDB header: protein binding/protein binding Chain: B: PDB Molecule: tola protein; PDBTitle: crystal structure of a complex between the ctxphi pii n-terminal2 domain and the vibrio cholerae tola c-terminal domain
43	c2iu1A	Alignment	not modelled	10.2	14	PDB header: transcription Chain: A: PDB Molecule: eukaryotic translation initiation factor 5; PDBTitle: crystal structure of eif5 c-terminal domain
44	c3ixrA	Alignment	not modelled	10.1	8	PDB header: oxidoreductase Chain: A: PDB Molecule: bacterioferritin comigratory protein; PDBTitle: crystal structure of xylella fastidiosa prqx c47s mutant
45	c4je1A	Alignment	not modelled	9.6	14	PDB header: oxidoreductase Chain: A: PDB Molecule: probable thiol peroxidase; PDBTitle: crystal structure of thiol peroxidase from burkholderia cenocepacia2 j2315
46	d3e9va1	Alignment	not modelled	9.6	27	Fold: BTG domain-like Superfamily: BTG domain-like Family: BTG domain-like
47	c4yk3B	Alignment	not modelled	9.4	20	PDB header: protein binding Chain: B: PDB Molecule: bepe protein; PDBTitle: crystal structure of the bid domain of bepe from bartonella henselae
48	c4yk2B	Alignment	not modelled	9.1	14	PDB header: protein binding Chain: B: PDB Molecule: bartonella effector protein (bep) substrate of virb t4ss; PDBTitle: crystal structure of the bid domain of bep9 from bartonella2 claridgeiae
49	c2eqmA	Alignment	not modelled	9.1	25	PDB header: transcription Chain: A: PDB Molecule: phd finger protein 20-like 1; PDBTitle: solution structure of the tudor domain of phd finger2 protein 20-like 1 [homo sapiens]
50	c2l5oA	Alignment	not modelled	8.9	47	PDB header: oxidoreductase Chain: A: PDB Molecule: putative thioredoxin; PDBTitle: solution structure of a putative thioredoxin from neisseria2 meningitidis
51	d1knqa	Alignment	not modelled	8.7	44	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
52	d1e6yb1	Alignment	not modelled	8.6	26	Fold: Methyl-coenzyme M reductase alpha and beta chain C-terminal domain Superfamily: Methyl-coenzyme M reductase alpha and beta chain C-terminal domain Family: Methyl-coenzyme M reductase alpha and beta chain C-terminal domain
53	d1rqba1	Alignment	not modelled	8.6	48	Fold: RuvA C-terminal domain-like Superfamily: post-HMGL domain-like Family: Conserved carboxylase domain

54	d2bzba1		not modelled	8.6	35	Fold: ROP-like Superfamily: BAS1536-like Family: BAS1536-like
55	c3rmrA_		not modelled	8.4	32	PDB header: protein binding Chain: A: PDB Molecule: avirulence protein; PDBTitle: crystal structure of <i>haloperonospora arabidopsis</i> atr1 effector2 domain
56	c2r37A_		not modelled	8.4	19	PDB header: oxidoreductase Chain: A: PDB Molecule: glutathione peroxidase 3; PDBTitle: crystal structure of human glutathione peroxidase 3 (selenocysteine to2 glycine mutant)
57	c2x5rA_		not modelled	8.3	37	PDB header: viral protein Chain: A: PDB Molecule: hypothetical protein orf126; PDBTitle: crystal structure of the hypothetical protein orf126 from <i>pyrobaculum2</i> spherical virus
58	c3gkna_		not modelled	8.3	15	PDB header: oxidoreductase Chain: A: PDB Molecule: bacterioferritin comigratory protein; PDBTitle: insights into the alkyl peroxide reduction activity of <i>xanthomonas2 campestris</i> bacterioferritin comigratory protein from the trapped3 intermediate/ligand complex structures
59	d1hbnb1		not modelled	8.3	38	Fold: Methyl-coenzyme M reductase alpha and beta chain C-terminal domain Superfamily: Methyl-coenzyme M reductase alpha and beta chain C-terminal domain Family: Methyl-coenzyme M reductase alpha and beta chain C-terminal domain
60	c3cmiA_		not modelled	8.2	31	PDB header: oxidoreductase Chain: A: PDB Molecule: peroxiredoxin hyr1; PDBTitle: crystal structure of glutathione-dependent phospholipid peroxidase2 hyr1 from the yeast <i>saccharomyces cerevisiae</i>
61	c4luqD_		not modelled	8.1	100	PDB header: protein binding/toxin inhibitor Chain: D: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of virulence effector tse3 in complex with2 neutralizer ts1
62	c4mm1E_		not modelled	8.1	24	PDB header: transferase Chain: E: PDB Molecule: geranylgeranylglycerol phosphate synthase; PDBTitle: ggpps from <i>methanothermobacter thermautotrophicus</i>
63	c6mn5A_		not modelled	8.1	25	PDB header: transferase/antibiotic Chain: A: PDB Molecule: aminoglycoside n(3)-acetyltransferase, aac(3)-iva; PDBTitle: crystal structure of aminoglycoside acetyltransferase aac(3)-iva,2 h154a mutant, in complex with gentamicin c1a
64	c2fulE_		not modelled	8.0	28	PDB header: translation Chain: E: PDB Molecule: eukaryotic translation initiation factor 5; PDBTitle: crystal structure of the c-terminal domain of <i>s. cerevisiae</i> eif5
65	d1zupa1		not modelled	7.8	33	Fold: Ribonuclease H-like motif Superfamily: Ribonuclease H-like Family: TM1739-like
66	c4gyxC_		not modelled	7.8	45	PDB header: structural protein, blood clotting Chain: C: PDB Molecule: type iii collagen fragment in a host peptide stabilized by PDBTitle: the von willebrand factor a3 domain binding region of type iii2 collagen stabilized by the cysteine knot
67	c6a97A_		not modelled	7.8	19	PDB header: immune system Chain: A: PDB Molecule: mhc i-like leukocyte 2 long form; PDBTitle: crystal structure of mhc-like mill2
68	c2IndA_		not modelled	7.8	44	PDB header: de novo protein Chain: A: PDB Molecule: de novo designed protein, pfk fold; PDBTitle: solution nmr structure of de novo designed protein, pfk fold,2 northeast structural genomics consortium target or134
69	c3hfxA_		not modelled	7.8	23	PDB header: transport protein Chain: A: PDB Molecule: l-carnitine/gamma-butyrobetaine antiporter; PDBTitle: crystal structure of carnitine transporter
70	c2b1kA_		not modelled	7.8	31	PDB header: oxidoreductase Chain: A: PDB Molecule: thiol:disulfide interchange protein dsbe; PDBTitle: crystal structure of <i>e. coli</i> ccmg protein
71	c5frgA_		not modelled	7.8	63	PDB header: protein binding Chain: A: PDB Molecule: formin-binding protein 1-like; PDBTitle: the nmr structure of the cdc42-interacting region of tocal1
72	c3hm6X_		not modelled	7.7	17	PDB header: signaling protein Chain: X: PDB Molecule: plexin-b1; PDBTitle: crystal structure of the cytoplasmic domain of human plexin b1
73	d2b0ja2		not modelled	7.7	70	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: 6-phosphogluconate dehydrogenase-like, N-terminal domain
74	c2wpzA_		not modelled	7.7	50	PDB header: transcription Chain: A: PDB Molecule: general control protein gcn4; PDBTitle: gcn4 leucine zipper mutant with two vxxxxxx motifs2 coordinating chloride
75	c5j4fB_		not modelled	7.6	22	PDB header: unknown function Chain: B: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of the n-terminally his6-tagged hp0902, an2 uncharacterized protein from <i>helicobacter pylori</i> 26695
76	c2y5tG_		not modelled	7.5	83	PDB header: immune system Chain: G: PDB Molecule: c1; PDBTitle: crystal structure of the pathogenic autoantibody cicl1 in complex with2 the triple-helical c1 peptide
77	c6qm7V_		not modelled	7.5	14	PDB header: hydrolase Chain: V: PDB Molecule: proteasome beta1 chain; PDBTitle: leishmania tarentolae proteasome 20s subunit complexed with gsk3494245
78	c4gyxB_		not modelled	7.5	45	PDB header: structural protein, blood clotting Chain: B: PDB Molecule: type iii collagen fragment in a host peptide stabilized by PDBTitle: the von willebrand factor a3 domain binding region of

79	c4gyxA	Alignment	not modelled	7.5	45	PDB header: type iii2 collagen stabilized by the cysteine knot Chain: A: PDB Molecule: type iii collagen fragment in a host peptide stabilized by PDBTitle: the von willebrand factor a3 domain binding region of type iii2 collagen stabilized by the cysteine knot
80	c5e6pA	Alignment	not modelled	7.4	24	PDB header: signaling protein Chain: A: PDB Molecule: plexin-b2; PDBTitle: plexinb2 cytoplasmic region/pdz-rhogef pdz domain complex
81	c3dwvB	Alignment	not modelled	7.3	13	PDB header: oxidoreductase Chain: B: PDB Molecule: glutathione peroxidase-like protein; PDBTitle: glutathione peroxidase-type tryparedoxin peroxidase, oxidized form
82	d2b5xa1	Alignment	not modelled	7.3	31	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
83	d1ui5a2	Alignment	not modelled	7.2	17	Fold: Tetracyclin repressor-like, C-terminal domain Superfamily: Tetracyclin repressor-like, C-terminal domain Family: Tetracyclin repressor-like, C-terminal domain
84	c5v6rB	Alignment	not modelled	7.2	17	PDB header: protein binding Chain: B: PDB Molecule: plexin-d1; PDBTitle: structure of plexin d1 intracellular domain
85	c2y5tE	Alignment	not modelled	7.2	83	PDB header: immune system Chain: E: PDB Molecule: c1; PDBTitle: crystal structure of the pathogenic autoantibody ciic1 in complex with2 the triple-helical c1 peptide
86	c3lwaA	Alignment	not modelled	7.2	31	PDB header: isomerase Chain: A: PDB Molecule: secreted thiol-disulfide isomerase; PDBTitle: the crystal structure of a secreted thiol-disulfide isomerase from2 corynebacterium glutamicum to 1.75a
87	c2wpzB	Alignment	not modelled	7.2	50	PDB header: transcription Chain: B: PDB Molecule: general control protein gcn4; PDBTitle: gcn4 leucine zipper mutant with two vxnnxxxx motifs2 coordinating chloride
88	c3ig3A	Alignment	not modelled	7.1	24	PDB header: signaling protein, membrane protein Chain: A: PDB Molecule: plxna3 protein; PDBTitle: crystal structure of mouse plexin a3 intracellular domain
89	c2c0dA	Alignment	not modelled	7.1	24	PDB header: oxidoreductase Chain: A: PDB Molecule: thioredoxin peroxidase 2; PDBTitle: structure of the mitochondrial 2-cys peroxiredoxin from2 plasmodium falciparum
90	c4h5bB	Alignment	not modelled	7.1	34	PDB header: unknown function Chain: B: PDB Molecule: dr_1245 protein; PDBTitle: crystal structure of dr_1245 from deinococcus radiodurans
91	c1de4A	Alignment	not modelled	7.1	16	PDB header: metal transport inhibitor/receptor Chain: A: PDB Molecule: hemochromatosis protein; PDBTitle: hemochromatosis protein hfe complexed with transferrin receptor
92	c3ia1A	Alignment	not modelled	7.0	31	PDB header: oxidoreductase Chain: A: PDB Molecule: thio-disulfide isomerase/thioredoxin; PDBTitle: crystal structure of thio-disulfide isomerase from thermus2 thermophilus
93	c2wpzC	Alignment	not modelled	7.0	50	PDB header: transcription Chain: C: PDB Molecule: general control protein gcn4; PDBTitle: gcn4 leucine zipper mutant with two vxnnxxxx motifs2 coordinating chloride
94	d1jfua	Alignment	not modelled	7.0	22	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
95	c3su8X	Alignment	not modelled	6.9	17	PDB header: apoptosis/signaling protein Chain: X: PDB Molecule: plexin-b1; PDBTitle: crystal structure of a truncated intracellular domain of plexin-b1 in2 complex with rac1
96	c4dmTC	Alignment	not modelled	6.9	38	PDB header: structural protein Chain: C: PDB Molecule: collagen iii derived peptide; PDBTitle: crystal structure of a vwf binding collagen iii derived triple helical2 peptide
97	c4dmTB	Alignment	not modelled	6.9	38	PDB header: structural protein Chain: B: PDB Molecule: collagen iii derived peptide; PDBTitle: crystal structure of a vwf binding collagen iii derived triple helical2 peptide
98	c4dmTA	Alignment	not modelled	6.9	38	PDB header: structural protein Chain: A: PDB Molecule: collagen iii derived peptide; PDBTitle: crystal structure of a vwf binding collagen iii derived triple helical2 peptide
99	d1we0a1	Alignment	not modelled	6.7	17	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like