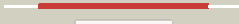



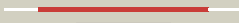
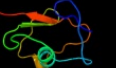











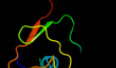






# Phyre2

|               |                             |
|---------------|-----------------------------|
| Email         | l.a.kelley@imperial.ac.uk   |
| Description   | O32583                      |
| Date          | Thu Jan 5 10:56:31 GMT 2012 |
| Unique Job ID | ba8c6defa8d48473            |

Detailed template information

| #  | Template                | Alignment Coverage  | 3D Model  | Confidence | % i.d. | Template Information  |
|----|-------------------------|---|---|------------|--------|---|
| 1  | <a href="#">c2kl0A_</a> |  Alignment   |    | 99.9       | 29     | <b>PDB header:</b> structural genomics, unknown function<br><b>Chain:</b> A: <b>PDB Molecule:</b> putative thiamin biosynthesis this;<br><b>PDBTitle:</b> solution nmr structure of rhodopseudomonas palustris rpa3574,2 northeast structural genomics consortium (nesg) target rpr325      |
| 2  | <a href="#">d1zud21</a> |  Alignment   |    | 99.9       | 100    | <b>Fold:</b> beta-Grasp (ubiquitin-like)<br><b>Superfamily:</b> Moad/ThiS<br><b>Family:</b> ThiS  |
| 3  | <a href="#">c3cwiA_</a> |  Alignment   |    | 99.8       | 24     | <b>PDB header:</b> biosynthetic protein<br><b>Chain:</b> A: <b>PDB Molecule:</b> thiamine-biosynthesis protein this;<br><b>PDBTitle:</b> crystal structure of thiamine biosynthesis protein (this)2 from geobacter metallireducens. northeast structural3 genomics consortium target gmr137 |
| 4  | <a href="#">d2cu3a1</a> |  Alignment   |    | 99.8       | 21     | <b>Fold:</b> beta-Grasp (ubiquitin-like)<br><b>Superfamily:</b> Moad/ThiS<br><b>Family:</b> ThiS  |
| 5  | <a href="#">d1tygb_</a> |  Alignment |  | 99.8       | 17     | <b>Fold:</b> beta-Grasp (ubiquitin-like)<br><b>Superfamily:</b> Moad/ThiS<br><b>Family:</b> ThiS  |
| 6  | <a href="#">c1tygG_</a> |  Alignment |  | 99.8       | 16     | <b>PDB header:</b> biosynthetic protein<br><b>Chain:</b> G: <b>PDB Molecule:</b> yjbs;<br><b>PDBTitle:</b> structure of the thiazole synthase/this complex  |
| 7  | <a href="#">c2q1eA_</a> |  Alignment |  | 98.2       | 23     | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> hypothetical protein ta0895;<br><b>PDBTitle:</b> solution structure of ta0895   |
| 8  | <a href="#">c2qieB_</a> |  Alignment |  | 98.2       | 20     | <b>PDB header:</b> transferase<br><b>Chain:</b> B: <b>PDB Molecule:</b> molybdopterin synthase small subunit;<br><b>PDBTitle:</b> staphylococcus aureus molybdopterin synthase in complex2 with precursor z   |
| 9  | <a href="#">c3po0A_</a> |  Alignment |  | 97.9       | 22     | <b>PDB header:</b> protein binding<br><b>Chain:</b> A: <b>PDB Molecule:</b> small archaeal modifier protein 1;<br><b>PDBTitle:</b> crystal structure of samp1 from haloferax volcanii   |
| 10 | <a href="#">d1v8ca1</a> |  Alignment |  | 97.8       | 25     | <b>Fold:</b> beta-Grasp (ubiquitin-like)<br><b>Superfamily:</b> Moad/ThiS<br><b>Family:</b> Moad  |
| 11 | <a href="#">c3rpfC_</a> |  Alignment |  | 97.7       | 26     | <b>PDB header:</b> transferase<br><b>Chain:</b> C: <b>PDB Molecule:</b> molybdopterin converting factor, subunit 1 (moad);<br><b>PDBTitle:</b> protein-protein complex of subunit 1 and 2 of molybdopterin-converting2 factor from helicobacter pylori 26695                                |

|    |                         |           |              |      |    |  |
|----|-------------------------|-----------|--------------|------|----|--|
| 12 | <a href="#">d1fm0d_</a> | Alignment |              | 97.6 | 28 | <b>Fold:</b> beta-Grasp (ubiquitin-like)<br><b>Superfamily:</b> MoaD/ThiS<br><b>Family:</b> MoaD   |
| 13 | <a href="#">c2qjlA_</a> | Alignment |              | 97.6 | 26 | <b>PDB header:</b> signaling protein<br><b>Chain:</b> A: <b>PDB Molecule:</b> ubiquitin-related modifier 1;<br><b>PDBTitle:</b> crystal structure of urm1  |
| 14 | <a href="#">c2l52A_</a> | Alignment |              | 97.5 | 20 | <b>PDB header:</b> protein binding<br><b>Chain:</b> A: <b>PDB Molecule:</b> methanosarcina acetivorans samp1 homolog;<br><b>PDBTitle:</b> solution structure of the small archaeal modifier protein 1 (samp1)2 from methanosarcina acetivorans   |
| 15 | <a href="#">d1xo3a_</a> | Alignment |              | 97.4 | 30 | <b>Fold:</b> beta-Grasp (ubiquitin-like)<br><b>Superfamily:</b> MoaD/ThiS<br><b>Family:</b> C9orf74 homolog  |
| 16 | <a href="#">d1vjka_</a> | Alignment |              | 97.4 | 23 | <b>Fold:</b> beta-Grasp (ubiquitin-like)<br><b>Superfamily:</b> MoaD/ThiS<br><b>Family:</b> MoaD   |
| 17 | <a href="#">c2k9xA_</a> | Alignment |              | 97.4 | 21 | <b>PDB header:</b> unknown function<br><b>Chain:</b> A: <b>PDB Molecule:</b> uncharacterized protein;<br><b>PDBTitle:</b> solution structure of urm1 from trypanosoma brucei   |
| 18 | <a href="#">d1wgka_</a> | Alignment |              | 97.3 | 24 | <b>Fold:</b> beta-Grasp (ubiquitin-like)<br><b>Superfamily:</b> MoaD/ThiS<br><b>Family:</b> C9orf74 homolog  |
| 19 | <a href="#">c1v8cA_</a> | Alignment |              | 97.3 | 28 | <b>PDB header:</b> protein binding<br><b>Chain:</b> A: <b>PDB Molecule:</b> moad related protein;<br><b>PDBTitle:</b> crystal structure of moad related protein from thermus2 thermophilus hb8   |
| 20 | <a href="#">c3dwmA_</a> | Alignment |              | 97.2 | 19 | <b>PDB header:</b> transferase<br><b>Chain:</b> A: <b>PDB Molecule:</b> 9.5 kda culture filtrate antigen cfp10a;<br><b>PDBTitle:</b> crystal structure of mycobacterium tuberculosis cyso, an antigen  |
| 21 | <a href="#">d1ryja_</a> | Alignment | not modelled | 97.2 | 29 | <b>Fold:</b> beta-Grasp (ubiquitin-like)<br><b>Superfamily:</b> MoaD/ThiS<br><b>Family:</b> ThiS   |
| 22 | <a href="#">c2kmmA_</a> | Alignment | not modelled | 97.0 | 21 | <b>PDB header:</b> hydrolase<br><b>Chain:</b> A: <b>PDB Molecule:</b> guanosine-3',5'-bis(diphosphate) 3'-<br><b>PDBTitle:</b> solution nmr structure of the tgs domain of pg1808 from2 porphyromonas gingivalis. northeast structural genomics3 consortium target pgr122a (418-481)             |
| 23 | <a href="#">d1rwsa_</a> | Alignment | not modelled | 96.9 | 24 | <b>Fold:</b> beta-Grasp (ubiquitin-like)<br><b>Superfamily:</b> MoaD/ThiS<br><b>Family:</b> ThiS   |
| 24 | <a href="#">c3hvbB_</a> | Alignment | not modelled | 96.1 | 17 | <b>PDB header:</b> structural genomics, unknown function<br><b>Chain:</b> B: <b>PDB Molecule:</b> uncharacterized protein;<br><b>PDBTitle:</b> crystal structure of the tgs domain of the clolep_03100 protein from2 clostridium leptum, northeast structural genomics consortium target3 qlr13a |
| 25 | <a href="#">d1tkea1</a> | Alignment | not modelled | 95.3 | 11 | <b>Fold:</b> beta-Grasp (ubiquitin-like)<br><b>Superfamily:</b> TGS-like<br><b>Family:</b> TGS domain  |
| 26 | <a href="#">d3c8ya2</a> | Alignment | not modelled | 94.9 | 13 | <b>Fold:</b> beta-Grasp (ubiquitin-like)<br><b>Superfamily:</b> 2Fe-2S ferredoxin-like<br><b>Family:</b> 2Fe-2S ferredoxin domains from multidomain proteins   |
| 27 | <a href="#">d1vlba2</a> | Alignment | not modelled | 94.8 | 17 | <b>Fold:</b> beta-Grasp (ubiquitin-like)<br><b>Superfamily:</b> 2Fe-2S ferredoxin-like<br><b>Family:</b> 2Fe-2S ferredoxin domains from multidomain proteins   |
| 28 | <a href="#">c1wwtA_</a> | Alignment | not modelled | 94.4 | 5  | <b>PDB header:</b> ligase<br><b>Chain:</b> A: <b>PDB Molecule:</b> threonyl-trna synthetase, cytoplasmic;<br><b>PDBTitle:</b> solution structure of the tgs domain from human threonyl-2 trna synthetase   |

|    |                         |           |              |      |    |  |
|----|-------------------------|-----------|--------------|------|----|--|
| 29 | <a href="#">c1c4cA</a>  | Alignment | not modelled | 93.6 | 13 | <b>PDB header:</b> oxidoreductase<br><b>Chain:</b> A: <b>PDB Molecule:</b> protein (fe-only hydrogenase);<br><b>PDBTitle:</b> binding of exogenously added carbon monoxide at the active2 site of the fe-only hydrogenase (cpi) from clostridium3 pasteurianum           |
| 30 | <a href="#">c2hj1A</a>  | Alignment | not modelled | 93.5 | 18 | <b>PDB header:</b> structural genomics, unknown function<br><b>Chain:</b> A: <b>PDB Molecule:</b> hypothetical protein;<br><b>PDBTitle:</b> crystal structure of a 3d domain-swapped dimer of protein hi0395 from2 haemophilus influenzae                                |
| 31 | <a href="#">d2hj1a1</a> | Alignment | not modelled | 93.5 | 18 | <b>Fold:</b> beta-Grasp (ubiquitin-like)<br><b>Superfamily:</b> MoaD/ThiS<br><b>Family:</b> HI0395-like  |
| 32 | <a href="#">c1nyqA</a>  | Alignment | not modelled | 92.6 | 17 | <b>PDB header:</b> ligase<br><b>Chain:</b> A: <b>PDB Molecule:</b> threonyl-trna synthetase 1;<br><b>PDBTitle:</b> structure of staphylococcus aureus threonyl-trna synthetase2 complexed with an analogue of threonyl adenylate   |
| 33 | <a href="#">d1dgia2</a> | Alignment | not modelled | 91.9 | 9  | <b>Fold:</b> beta-Grasp (ubiquitin-like)<br><b>Superfamily:</b> 2Fe-2S ferredoxin-like<br><b>Family:</b> 2Fe-2S ferredoxin domains from multidomain proteins   |
| 34 | <a href="#">d1t3qa2</a> | Alignment | not modelled | 91.4 | 10 | <b>Fold:</b> beta-Grasp (ubiquitin-like)<br><b>Superfamily:</b> 2Fe-2S ferredoxin-like<br><b>Family:</b> 2Fe-2S ferredoxin domains from multidomain proteins   |
| 35 | <a href="#">d1n62a2</a> | Alignment | not modelled | 91.2 | 11 | <b>Fold:</b> beta-Grasp (ubiquitin-like)<br><b>Superfamily:</b> 2Fe-2S ferredoxin-like<br><b>Family:</b> 2Fe-2S ferredoxin domains from multidomain proteins   |
| 36 | <a href="#">d1ffva2</a> | Alignment | not modelled | 89.9 | 17 | <b>Fold:</b> beta-Grasp (ubiquitin-like)<br><b>Superfamily:</b> 2Fe-2S ferredoxin-like<br><b>Family:</b> 2Fe-2S ferredoxin domains from multidomain proteins   |
| 37 | <a href="#">d2fug33</a> | Alignment | not modelled | 89.7 | 13 | <b>Fold:</b> beta-Grasp (ubiquitin-like)<br><b>Superfamily:</b> 2Fe-2S ferredoxin-like<br><b>Family:</b> 2Fe-2S ferredoxin domains from multidomain proteins   |
| 38 | <a href="#">d1rm6c2</a> | Alignment | not modelled | 89.0 | 7  | <b>Fold:</b> beta-Grasp (ubiquitin-like)<br><b>Superfamily:</b> 2Fe-2S ferredoxin-like<br><b>Family:</b> 2Fe-2S ferredoxin domains from multidomain proteins   |
| 39 | <a href="#">d1ud7a</a>  | Alignment | not modelled | 88.0 | 15 | <b>Fold:</b> beta-Grasp (ubiquitin-like)<br><b>Superfamily:</b> Ubiquitin-like<br><b>Family:</b> Ubiquitin-related   |
| 40 | <a href="#">d1wxqa2</a> | Alignment | not modelled | 88.0 | 19 | <b>Fold:</b> beta-Grasp (ubiquitin-like)<br><b>Superfamily:</b> TGS-like<br><b>Family:</b> G domain-linked domain  |
| 41 | <a href="#">c1tkeA</a>  | Alignment | not modelled | 87.8 | 11 | <b>PDB header:</b> ligase<br><b>Chain:</b> A: <b>PDB Molecule:</b> threonyl-trna synthetase;<br><b>PDBTitle:</b> crystal structure of the editing domain of threonyl-trna2 synthetase complexed with serine  |
| 42 | <a href="#">c1yx5B</a>  | Alignment | not modelled | 86.1 | 14 | <b>PDB header:</b> hydrolase<br><b>Chain:</b> B: <b>PDB Molecule:</b> ubiquitin;<br><b>PDBTitle:</b> solution structure of s5a uim-1/ubiquitin complex   |
| 43 | <a href="#">d1c3ta</a>  | Alignment | not modelled | 85.7 | 17 | <b>Fold:</b> beta-Grasp (ubiquitin-like)<br><b>Superfamily:</b> Ubiquitin-like<br><b>Family:</b> Ubiquitin-related   |
| 44 | <a href="#">c2ekiA</a>  | Alignment | not modelled | 84.2 | 15 | <b>PDB header:</b> signaling protein<br><b>Chain:</b> A: <b>PDB Molecule:</b> developmentally-regulated gtp-binding protein 1;<br><b>PDBTitle:</b> solution structures of the tgs domain of human2 developmentally-regulated gtp-binding protein 1                       |
| 45 | <a href="#">c1n60D</a>  | Alignment | not modelled | 83.8 | 12 | <b>PDB header:</b> oxidoreductase<br><b>Chain:</b> D: <b>PDB Molecule:</b> carbon monoxide dehydrogenase small chain;<br><b>PDBTitle:</b> crystal structure of the cu,mo-co dehydrogenase (codh); cyanide-2 inactivated form   |
| 46 | <a href="#">c1t3qD</a>  | Alignment | not modelled | 82.9 | 7  | <b>PDB header:</b> oxidoreductase<br><b>Chain:</b> D: <b>PDB Molecule:</b> quinoline 2-oxidoreductase small subunit;<br><b>PDBTitle:</b> crystal structure of quinoline 2-oxidoreductase from pseudomonas2 putida 86   |
| 47 | <a href="#">d1nyra2</a> | Alignment | not modelled | 80.7 | 16 | <b>Fold:</b> beta-Grasp (ubiquitin-like)<br><b>Superfamily:</b> TGS-like<br><b>Family:</b> TGS domain  |
| 48 | <a href="#">c2fugC</a>  | Alignment | not modelled | 79.1 | 13 | <b>PDB header:</b> oxidoreductase<br><b>Chain:</b> C: <b>PDB Molecule:</b> nadh-quinone oxidoreductase chain 3;<br><b>PDBTitle:</b> crystal structure of the hydrophilic domain of respiratory complex i2 from thermus thermophilus                                      |
| 49 | <a href="#">c1ffuA</a>  | Alignment | not modelled | 78.7 | 17 | <b>PDB header:</b> hydrolase<br><b>Chain:</b> A: <b>PDB Molecule:</b> cuts, iron-sulfur protein of carbon monoxide<br><b>PDBTitle:</b> carbon monoxide dehydrogenase from hydrogenophaga2 pseudoflava which lacks the mo-pyranopterin moiety of the3 molybdenum cofactor |
| 50 | <a href="#">c3hrdH</a>  | Alignment | not modelled | 78.5 | 15 | <b>PDB header:</b> oxidoreductase<br><b>Chain:</b> H: <b>PDB Molecule:</b> nicotinate dehydrogenase small fes subunit;<br><b>PDBTitle:</b> crystal structure of nicotinate dehydrogenase   |
| 51 | <a href="#">d1euvb</a>  | Alignment | not modelled | 76.3 | 12 | <b>Fold:</b> beta-Grasp (ubiquitin-like)<br><b>Superfamily:</b> Ubiquitin-like<br><b>Family:</b> Ubiquitin-related   |
| 52 | <a href="#">c1rm6F</a>  | Alignment | not modelled | 75.5 | 7  | <b>PDB header:</b> oxidoreductase<br><b>Chain:</b> F: <b>PDB Molecule:</b> 4-hydroxybenzoyl-coa reductase gamma subunit;<br><b>PDBTitle:</b> structure of 4-hydroxybenzoyl-coa reductase from thauera2 aromatica   |
| 53 | <a href="#">c1qf6A</a>  | Alignment | not modelled | 73.4 | 13 | <b>PDB header:</b> ligase/rna<br><b>Chain:</b> A: <b>PDB Molecule:</b> threonyl-trna synthetase;<br><b>PDBTitle:</b> structure of e. coli threonyl-trna synthetase complexed with its2 cognate trna  |

|    |                         |           |              |      |    |   |
|----|-------------------------|-----------|--------------|------|----|---|
| 54 | <a href="#">d1uela_</a> | Alignment | not modelled | 72.8 | 18 | <b>Fold:</b> beta-Grasp (ubiquitin-like)<br><b>Superfamily:</b> Ubiquitin-like<br><b>Family:</b> Ubiquitin-related  |
| 55 | <a href="#">c1vlbA_</a> | Alignment | not modelled | 72.8 | 22 | <b>PDB header:</b> oxidoreductase<br><b>Chain:</b> A: <b>PDB Molecule:</b> aldehyde oxidoreductase;<br><b>PDBTitle:</b> structure refinement of the aldehyde oxidoreductase from2 desulfovibrio gigas at 1.28 a   |
| 56 | <a href="#">d1ogwa_</a> | Alignment | not modelled | 72.1 | 12 | <b>Fold:</b> beta-Grasp (ubiquitin-like)<br><b>Superfamily:</b> Ubiquitin-like<br><b>Family:</b> Ubiquitin-related  |
| 57 | <a href="#">d1wm3a_</a> | Alignment | not modelled | 71.5 | 17 | <b>Fold:</b> beta-Grasp (ubiquitin-like)<br><b>Superfamily:</b> Ubiquitin-like<br><b>Family:</b> Ubiquitin-related  |
| 58 | <a href="#">c2kd0A_</a> | Alignment | not modelled | 70.9 | 20 | <b>PDB header:</b> signaling protein<br><b>Chain:</b> A: <b>PDB Molecule:</b> lrr repeats and ubiquitin-like domain-containing<br><b>PDBTitle:</b> nmr solution structure of o64736 protein from arabidopsis2 thaliana. northeast structural genomics consortium mega3 target ar3445a                       |
| 59 | <a href="#">d1wgga_</a> | Alignment | not modelled | 69.7 | 12 | <b>Fold:</b> beta-Grasp (ubiquitin-like)<br><b>Superfamily:</b> Ubiquitin-like<br><b>Family:</b> Ubiquitin-related  |
| 60 | <a href="#">d1jroa2</a> | Alignment | not modelled | 69.4 | 21 | <b>Fold:</b> beta-Grasp (ubiquitin-like)<br><b>Superfamily:</b> 2Fe-2S ferredoxin-like<br><b>Family:</b> 2Fe-2S ferredoxin domains from multidomain proteins  |
| 61 | <a href="#">d1v97a2</a> | Alignment | not modelled | 69.4 | 17 | <b>Fold:</b> beta-Grasp (ubiquitin-like)<br><b>Superfamily:</b> 2Fe-2S ferredoxin-like<br><b>Family:</b> 2Fe-2S ferredoxin domains from multidomain proteins  |
| 62 | <a href="#">d1v86a_</a> | Alignment | not modelled | 66.5 | 15 | <b>Fold:</b> beta-Grasp (ubiquitin-like)<br><b>Superfamily:</b> Ubiquitin-like<br><b>Family:</b> Ubiquitin-related  |
| 63 | <a href="#">c3tixA_</a> | Alignment | not modelled | 64.4 | 12 | <b>PDB header:</b> gene regulation/protein binding<br><b>Chain:</b> A: <b>PDB Molecule:</b> ubiquitin-like protein smt3, rna-induced transcriptional<br><b>PDBTitle:</b> crystal structure of the chp1-tas3 complex core  |
| 64 | <a href="#">d1bt0a_</a> | Alignment | not modelled | 63.2 | 12 | <b>Fold:</b> beta-Grasp (ubiquitin-like)<br><b>Superfamily:</b> Ubiquitin-like<br><b>Family:</b> Ubiquitin-related  |
| 65 | <a href="#">c3a4rB_</a> | Alignment | not modelled | 63.0 | 15 | <b>PDB header:</b> transcription<br><b>Chain:</b> B: <b>PDB Molecule:</b> nfatc2-interacting protein;<br><b>PDBTitle:</b> the crystal structure of sumo-like domain 2 in nip45  |
| 66 | <a href="#">d2io3b1</a> | Alignment | not modelled | 60.7 | 21 | <b>Fold:</b> beta-Grasp (ubiquitin-like)<br><b>Superfamily:</b> Ubiquitin-like<br><b>Family:</b> Ubiquitin-related  |
| 67 | <a href="#">d1we7a_</a> | Alignment | not modelled | 59.8 | 14 | <b>Fold:</b> beta-Grasp (ubiquitin-like)<br><b>Superfamily:</b> Ubiquitin-like<br><b>Family:</b> Ubiquitin-related  |
| 68 | <a href="#">d1ndda_</a> | Alignment | not modelled | 59.3 | 13 | <b>Fold:</b> beta-Grasp (ubiquitin-like)<br><b>Superfamily:</b> Ubiquitin-like<br><b>Family:</b> Ubiquitin-related  |
| 69 | <a href="#">c1dgiA_</a> | Alignment | not modelled | 59.3 | 11 | <b>PDB header:</b> oxidoreductase<br><b>Chain:</b> A: <b>PDB Molecule:</b> aldehyde oxidoreductase;<br><b>PDBTitle:</b> crystal structure of the aldehyde oxidoreductase from2 desulfovibrio desulfuricans atcc 27774   |
| 70 | <a href="#">c2jxxA_</a> | Alignment | not modelled | 58.1 | 13 | <b>PDB header:</b> protein binding<br><b>Chain:</b> A: <b>PDB Molecule:</b> nfatc2-interacting protein;<br><b>PDBTitle:</b> nmr solution structure of ubiquitin-like domain of2 nfatc2ip. northeast structural genomics consortium target3 hr5627   |
| 71 | <a href="#">d1wh3a_</a> | Alignment | not modelled | 57.8 | 17 | <b>Fold:</b> beta-Grasp (ubiquitin-like)<br><b>Superfamily:</b> Ubiquitin-like<br><b>Family:</b> Ubiquitin-related  |
| 72 | <a href="#">c3pgeA_</a> | Alignment | not modelled | 57.1 | 12 | <b>PDB header:</b> dna binding protein<br><b>Chain:</b> A: <b>PDB Molecule:</b> sumo-modified proliferating cell nuclear antigen;<br><b>PDBTitle:</b> structure of sumoylated pcna  |
| 73 | <a href="#">c3goeA_</a> | Alignment | not modelled | 54.6 | 17 | <b>PDB header:</b> recombination, replication<br><b>Chain:</b> A: <b>PDB Molecule:</b> dna repair protein rad60;<br><b>PDBTitle:</b> molecular mimicry of sumo promotes dna repair  |
| 74 | <a href="#">c3eubJ_</a> | Alignment | not modelled | 53.7 | 18 | <b>PDB header:</b> oxidoreductase<br><b>Chain:</b> J: <b>PDB Molecule:</b> xanthine dehydrogenase/oxidase;<br><b>PDBTitle:</b> crystal structure of desulfo-xanthine oxidase with xanthine  |
| 75 | <a href="#">c3b9jI_</a> | Alignment | not modelled | 52.8 | 18 | <b>PDB header:</b> oxidoreductase<br><b>Chain:</b> I: <b>PDB Molecule:</b> xanthine oxidase;<br><b>PDBTitle:</b> structure of xanthine oxidase with 2-hydroxy-6-methylpurine  |
| 76 | <a href="#">d2faza1</a> | Alignment | not modelled | 52.6 | 18 | <b>Fold:</b> beta-Grasp (ubiquitin-like)<br><b>Superfamily:</b> Ubiquitin-like<br><b>Family:</b> Ubiquitin-related  |
| 77 | <a href="#">d1sifa_</a> | Alignment | not modelled | 52.5 | 10 | <b>Fold:</b> beta-Grasp (ubiquitin-like)<br><b>Superfamily:</b> Ubiquitin-like<br><b>Family:</b> Ubiquitin-related  |
| 78 | <a href="#">c2kanA_</a> | Alignment | not modelled | 51.6 | 12 | <b>PDB header:</b> structural genomics, unknown function<br><b>Chain:</b> A: <b>PDB Molecule:</b> uncharacterized protein ar3433a;<br><b>PDBTitle:</b> solution nmr structure of ubiquitin-like domain of2 arabidopsis thaliana protein at2g32350. northeast3 structural genomics consortium target ar3433a |
| 79 | <a href="#">d2uyzb1</a> | Alignment | not modelled | 51.6 | 12 | <b>Fold:</b> beta-Grasp (ubiquitin-like)<br><b>Superfamily:</b> Ubiquitin-like<br><b>Family:</b> Ubiquitin-related  |
|    |                         |           |              |      |    | <b>PDB header:</b> signaling protein  |

|     |                         |           |              |      |    |  |
|-----|-------------------------|-----------|--------------|------|----|--|
| 80  | <a href="#">c2k8hA_</a> | Alignment | not modelled | 51.2 | 10 | <b>Chain:</b> A: <b>PDB Molecule:</b> small ubiquitin protein;<br><b>PDBTitle:</b> solution structure of sumo from trypanosoma brucei  |
| 81  | <a href="#">c2ekeC_</a> | Alignment | not modelled | 51.1 | 10 | <b>PDB header:</b> ligase/protein binding<br><b>Chain:</b> C: <b>PDB Molecule:</b> ubiquitin-like protein smt3;<br><b>PDBTitle:</b> structure of a sumo-binding-motif mimic bound to smt3p-2 ubc9p: conservation of a noncovalent ubiquitin-like3 protein-e2 complex as a platform for selective4 interactions within a sumo pathway |
| 82  | <a href="#">d2piea1</a> | Alignment | not modelled | 47.7 | 21 | <b>Fold:</b> SMAD/FHA domain<br><b>Superfamily:</b> SMAD/FHA domain<br><b>Family:</b> FHA domain   |
| 83  | <a href="#">d2g1la1</a> | Alignment | not modelled | 47.3 | 23 | <b>Fold:</b> SMAD/FHA domain<br><b>Superfamily:</b> SMAD/FHA domain<br><b>Family:</b> FHA domain   |
| 84  | <a href="#">d1a5ra_</a> | Alignment | not modelled | 46.6 | 14 | <b>Fold:</b> beta-Grasp (ubiquitin-like)<br><b>Superfamily:</b> Ubiquitin-like<br><b>Family:</b> Ubiquitin-related   |
| 85  | <a href="#">d1gxca_</a> | Alignment | not modelled | 46.6 | 17 | <b>Fold:</b> SMAD/FHA domain<br><b>Superfamily:</b> SMAD/FHA domain<br><b>Family:</b> FHA domain   |
| 86  | <a href="#">c1gxCA_</a> | Alignment | not modelled | 46.6 | 17 | <b>PDB header:</b> phosphoprotein-binding domain<br><b>Chain:</b> A: <b>PDB Molecule:</b> serine/threonine-protein kinase chk2;<br><b>PDBTitle:</b> fha domain from human chk2 kinase in complex with a2 synthetic phosphopeptide  |
| 87  | <a href="#">c2176A_</a> | Alignment | not modelled | 46.4 | 9  | <b>PDB header:</b> transcription<br><b>Chain:</b> A: <b>PDB Molecule:</b> nfatc2-interacting protein;<br><b>PDBTitle:</b> solution nmr structure of human nfatc2ip ubiquitin-like domain,2 nfatc2ip_244_338, nesg target ht65a/ocsp target hs00387_244_338/sgc-3 toronto   |
| 88  | <a href="#">d1wz0a1</a> | Alignment | not modelled | 45.4 | 17 | <b>Fold:</b> beta-Grasp (ubiquitin-like)<br><b>Superfamily:</b> Ubiquitin-like<br><b>Family:</b> Ubiquitin-related   |
| 89  | <a href="#">d1v5oa_</a> | Alignment | not modelled | 44.1 | 15 | <b>Fold:</b> beta-Grasp (ubiquitin-like)<br><b>Superfamily:</b> Ubiquitin-like<br><b>Family:</b> Ubiquitin-related   |
| 90  | <a href="#">d1yfba1</a> | Alignment | not modelled | 44.0 | 14 | <b>Fold:</b> Double-split beta-barrel<br><b>Superfamily:</b> AbrB/MazE/MraZ-like<br><b>Family:</b> AbrB N-terminal domain-like   |
| 91  | <a href="#">c217rA_</a> | Alignment | not modelled | 43.3 | 15 | <b>PDB header:</b> protein binding<br><b>Chain:</b> A: <b>PDB Molecule:</b> ubiquitin-like protein fubi;<br><b>PDBTitle:</b> solution nmr structure of n-terminal ubiquitin-like domain of fubi, a2 ribosomal protein s30 precursor from homo sapiens. northeast3 structural genomics consortium (nesg) target hr6166                |
| 92  | <a href="#">d1j8ca_</a> | Alignment | not modelled | 42.8 | 15 | <b>Fold:</b> beta-Grasp (ubiquitin-like)<br><b>Superfamily:</b> Ubiquitin-like<br><b>Family:</b> Ubiquitin-related   |
| 93  | <a href="#">c3dh3C_</a> | Alignment | not modelled | 42.7 | 12 | <b>PDB header:</b> isomerase/rna<br><b>Chain:</b> C: <b>PDB Molecule:</b> ribosomal large subunit pseudouridine synthase f;<br><b>PDBTitle:</b> crystal structure of rluf in complex with a 22 nucleotide2 rna substrate   |
| 94  | <a href="#">d1g3ga_</a> | Alignment | not modelled | 42.4 | 25 | <b>Fold:</b> SMAD/FHA domain<br><b>Superfamily:</b> SMAD/FHA domain<br><b>Family:</b> FHA domain   |
| 95  | <a href="#">c2eh0A_</a> | Alignment | not modelled | 41.0 | 18 | <b>PDB header:</b> transport protein<br><b>Chain:</b> A: <b>PDB Molecule:</b> kinesin-like protein kif1b;<br><b>PDBTitle:</b> solution structure of the fha domain from human kinesin-2 like protein kif1b   |
| 96  | <a href="#">c3lzkC_</a> | Alignment | not modelled | 40.8 | 10 | <b>PDB header:</b> hydrolase<br><b>Chain:</b> C: <b>PDB Molecule:</b> fumarylacetoacetate hydrolase family protein;<br><b>PDBTitle:</b> the crystal structure of a probably aromatic amino acid2 degradation protein from sinorhizobium meliloti 1021  |
| 97  | <a href="#">c3kt9A_</a> | Alignment | not modelled | 40.3 | 17 | <b>PDB header:</b> hydrolase<br><b>Chain:</b> A: <b>PDB Molecule:</b> aprataxin;<br><b>PDBTitle:</b> aprataxin fha domain  |
| 98  | <a href="#">d2fy9a1</a> | Alignment | not modelled | 40.2 | 23 | <b>Fold:</b> Double-split beta-barrel<br><b>Superfamily:</b> AbrB/MazE/MraZ-like<br><b>Family:</b> AbrB N-terminal domain-like   |
| 99  | <a href="#">d1iyfa_</a> | Alignment | not modelled | 40.0 | 7  | <b>Fold:</b> beta-Grasp (ubiquitin-like)<br><b>Superfamily:</b> Ubiquitin-like<br><b>Family:</b> Ubiquitin-related   |
| 100 | <a href="#">c3hx1B_</a> | Alignment | not modelled | 39.4 | 30 | <b>PDB header:</b> structural genomics, unknown function<br><b>Chain:</b> B: <b>PDB Molecule:</b> slr1951 protein;<br><b>PDBTitle:</b> crystal structure of the slr1951 protein from synechocystis sp.2 northeast structural genomics consortium target sgr167a  |
| 101 | <a href="#">c2w3rG_</a> | Alignment | not modelled | 38.5 | 18 | <b>PDB header:</b> oxidoreductase<br><b>Chain:</b> G: <b>PDB Molecule:</b> xanthine dehydrogenase;<br><b>PDBTitle:</b> crystal structure of xanthine dehydrogenase (desulfo form)2 from rhodobacter capsulatus in complex with hypoxanthine  |
| 102 | <a href="#">d1yjma1</a> | Alignment | not modelled | 38.4 | 13 | <b>Fold:</b> SMAD/FHA domain<br><b>Superfamily:</b> SMAD/FHA domain<br><b>Family:</b> FHA domain   |
| 103 | <a href="#">c3jxoB_</a> | Alignment | not modelled | 37.0 | 20 | <b>PDB header:</b> transport protein<br><b>Chain:</b> B: <b>PDB Molecule:</b> trka-n domain protein;<br><b>PDBTitle:</b> crystal structure of an octomeric two-subunit trka k+ channel ring2 gating assembly, tm1088a:tm1088b, from thermotoga maritima  |
| 104 | <a href="#">c2w1tB_</a> | Alignment | not modelled | 37.0 | 23 | <b>PDB header:</b> transcription<br><b>Chain:</b> B: <b>PDB Molecule:</b> stage v sporulation protein t;<br><b>PDBTitle:</b> crystal structure of b. subtilis spovt  |

|     |                         |           |              |      |    |   |
|-----|-------------------------|-----------|--------------|------|----|---|
| 105 | <a href="#">d1wy8a1</a> | Alignment | not modelled | 36.8 | 23 | <b>Fold:</b> beta-Grasp (ubiquitin-like)<br><b>Superfamily:</b> Ubiquitin-like<br><b>Family:</b> Ubiquitin-related  |
| 106 | <a href="#">d1p9ka</a>  | Alignment | not modelled | 36.7 | 18 | <b>Fold:</b> Alpha-L RNA-binding motif<br><b>Superfamily:</b> Alpha-L RNA-binding motif<br><b>Family:</b> YbcJ-like   |
| 107 | <a href="#">c3fm8A</a>  | Alignment | not modelled | 36.4 | 27 | <b>PDB header:</b> transport protein/hydrolase activator<br><b>Chain:</b> A: <b>PDB Molecule:</b> kinesin-like protein kif13b;<br><b>PDBTitle:</b> crystal structure of full length centaurin alpha-1 bound with the fha2 domain of kif13b (capri target)         |
| 108 | <a href="#">c2ro5B</a>  | Alignment | not modelled | 36.4 | 23 | <b>PDB header:</b> transcription<br><b>Chain:</b> B: <b>PDB Molecule:</b> stage v sporulation protein t;<br><b>PDBTitle:</b> rdc-refined solution structure of the n-terminal dna2 recognition domain of the bacillus subtilis transition-3 state regulator spovt |
| 109 | <a href="#">c2glwA</a>  | Alignment | not modelled | 35.3 | 19 | <b>PDB header:</b> transcription<br><b>Chain:</b> A: <b>PDB Molecule:</b> 92aa long hypothetical protein;<br><b>PDBTitle:</b> the solution structure of phs018 from pyrococcus horikoshii   |
| 110 | <a href="#">d1dm9a</a>  | Alignment | not modelled | 33.5 | 24 | <b>Fold:</b> Alpha-L RNA-binding motif<br><b>Superfamily:</b> Alpha-L RNA-binding motif<br><b>Family:</b> Heat shock protein 15 kD  |
| 111 | <a href="#">c1dm9A</a>  | Alignment | not modelled | 33.5 | 24 | <b>PDB header:</b> structural genomics<br><b>Chain:</b> A: <b>PDB Molecule:</b> hypothetical 15.5 kd protein in mrca-pcka<br><b>PDBTitle:</b> heat shock protein 15 kd  |
| 112 | <a href="#">d1zkha1</a> | Alignment | not modelled | 33.2 | 16 | <b>Fold:</b> beta-Grasp (ubiquitin-like)<br><b>Superfamily:</b> Ubiquitin-like<br><b>Family:</b> Ubiquitin-related  |
| 113 | <a href="#">c2bknA</a>  | Alignment | not modelled | 33.0 | 16 | <b>PDB header:</b> membrane protein<br><b>Chain:</b> A: <b>PDB Molecule:</b> hypothetical protein ph0236;<br><b>PDBTitle:</b> structure analysis of unknown function protein  |
| 114 | <a href="#">c2jq1A</a>  | Alignment | not modelled | 31.2 | 26 | <b>PDB header:</b> cell cycle<br><b>Chain:</b> A: <b>PDB Molecule:</b> dna damage response protein kinase dun1;<br><b>PDBTitle:</b> nmr structure of the yeast dun1 fha domain in complex with2 a doubly phosphorylated (pt) peptide derived from rad533 scd1     |
| 115 | <a href="#">c3m62B</a>  | Alignment | not modelled | 31.1 | 15 | <b>PDB header:</b> ligase/protein binding<br><b>Chain:</b> B: <b>PDB Molecule:</b> uv excision repair protein rad23;<br><b>PDBTitle:</b> crystal structure of ufd2 in complex with the ubiquitin-like (ubl)2 domain of rad23                                      |
| 116 | <a href="#">c2dziA</a>  | Alignment | not modelled | 31.0 | 12 | <b>PDB header:</b> structural genomics, unknown function<br><b>Chain:</b> A: <b>PDB Molecule:</b> ubiquitin-like protein 4a;<br><b>PDBTitle:</b> 2dzi/solution structure of the n-terminal ubiquitin-like2 domain in human ubiquitin-like protein 4a (gdx)        |
| 117 | <a href="#">c1yj5C</a>  | Alignment | not modelled | 28.5 | 14 | <b>PDB header:</b> transferase<br><b>Chain:</b> C: <b>PDB Molecule:</b> 5' polynucleotide kinase-3' phosphatase fha domain;<br><b>PDBTitle:</b> molecular architecture of mammalian polynucleotide kinase, a dna2 repair enzyme                                   |
| 118 | <a href="#">c2kdiA</a>  | Alignment | not modelled | 27.8 | 10 | <b>PDB header:</b> signaling protein<br><b>Chain:</b> A: <b>PDB Molecule:</b> ubiquitin, vacuolar protein sorting-associated<br><b>PDBTitle:</b> solution structure of a ubiquitin/uim fusion protein   |
| 119 | <a href="#">d1vcta2</a> | Alignment | not modelled | 27.4 | 16 | <b>Fold:</b> TrkA C-terminal domain-like<br><b>Superfamily:</b> TrkA C-terminal domain-like<br><b>Family:</b> TrkA C-terminal domain-like   |
| 120 | <a href="#">d1oqya4</a> | Alignment | not modelled | 27.4 | 17 | <b>Fold:</b> beta-Grasp (ubiquitin-like)<br><b>Superfamily:</b> Ubiquitin-like<br><b>Family:</b> Ubiquitin-related  |