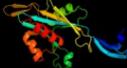
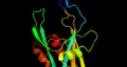
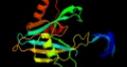
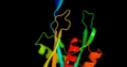
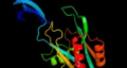
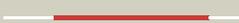
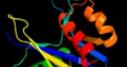
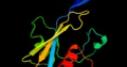
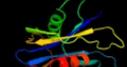
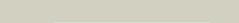
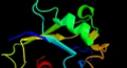


Phyre2

Email	l.a.kelley@imperial.ac.uk
Description	P37128
Date	Thu Jan 5 11:54:49 GMT 2012
Unique Job ID	4be7e17fd0e08125

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d1viua_	 Alignment		100.0	97	Fold: Nudix Superfamily: Nudix Family: MuT-like
2	d1g0sa_	 Alignment		100.0	29	Fold: Nudix Superfamily: Nudix Family: MuT-like
3	d1vhza_	 Alignment		100.0	19	Fold: Nudix Superfamily: Nudix Family: MuT-like
4	c3bm4B_	 Alignment		100.0	26	PDB header: hydrolase Chain: B: PDB Molecule: adp-sugar pyrophosphatase; PDBTitle: crystal structure of human adp-ribose pyrophosphatase nudt52 in complex with magnesium and ampcpr
5	d1mqea_	 Alignment		100.0	22	Fold: Nudix Superfamily: Nudix Family: MuT-like
6	c2yv0A_	 Alignment		100.0	27	PDB header: hydrolase Chain: A: PDB Molecule: mutt/nudix family protein; PDBTitle: crystal structure of ndx2 in complex with mg2+ and amp from thermus2 thermophilus hb8
7	c3q91D_	 Alignment		100.0	26	PDB header: hydrolase Chain: D: PDB Molecule: uridine diphosphate glucose pyrophosphatase; PDBTitle: crystal structure of human uridine diphosphate glucose pyrophosphatase2 (nudt14)
8	d1v8ya_	 Alignment		100.0	29	Fold: Nudix Superfamily: Nudix Family: MuT-like
9	c2w4eA_	 Alignment		100.0	29	PDB header: hydrolase Chain: A: PDB Molecule: mutt/nudix family protein; PDBTitle: structure of an n-terminally truncated nudix hydrolase2 dr2204 from deinococcus radiodurans
10	d1sjya_	 Alignment		99.8	20	Fold: Nudix Superfamily: Nudix Family: MuT-like
11	d2o5fa1	 Alignment		99.7	21	Fold: Nudix Superfamily: Nudix Family: IPP isomerase-like

12	d1vk6a2	Alignment		99.7	15	Fold: Nudix Superfamily: Nudix Family: NADH pyrophosphatase
13	c2jvbA	Alignment		99.7	15	PDB header: hydrolase Chain: A: PDB Molecule: mrna-decapping enzyme subunit 2; PDBTitle: solution structure of catalytic domain of ydcp2
14	c2gb5B	Alignment		99.7	19	PDB header: hydrolase Chain: B: PDB Molecule: nadh pyrophosphatase; PDBTitle: crystal structure of nadh pyrophosphatase (ec 3.6.1.22) (1790429) from2 escherichia coli k12 at 2.30 a resolution
15	d1nqza	Alignment		99.7	23	Fold: Nudix Superfamily: Nudix Family: MutT-like
16	c3dkuB	Alignment		99.7	17	PDB header: hydrolase Chain: B: PDB Molecule: putative phosphohydrolase; PDBTitle: crystal structure of nudix hydrolase orf153, ymfb, from2 escherichia coli k-1
17	d2b0va1	Alignment		99.7	13	Fold: Nudix Superfamily: Nudix Family: MutT-like
18	d2fkba1	Alignment		99.7	18	Fold: Nudix Superfamily: Nudix Family: IPP isomerase-like
19	c2o1cB	Alignment		99.7	16	PDB header: hydrolase Chain: B: PDB Molecule: datp pyrophosphohydrolase; PDBTitle: structure of the e. coli dihydroneopterin triphosphate2 pyrophosphohydrolase
20	d2a6ta2	Alignment		99.7	14	Fold: Nudix Superfamily: Nudix Family: mRNA decapping enzyme-like
21	c2fvvA	Alignment	not modelled	99.7	14	PDB header: hydrolase Chain: A: PDB Molecule: diphosphoinositol polyphosphate phosphohydrolase PDBTitle: human diphosphoinositol polyphosphate phosphohydrolase 1
22	d2fvva1	Alignment	not modelled	99.7	14	Fold: Nudix Superfamily: Nudix Family: MutT-like
23	c3h95A	Alignment	not modelled	99.7	14	PDB header: gene regulation Chain: A: PDB Molecule: nucleoside diphosphate-linked moiety x motif 6; PDBTitle: crystal structure of the nudix domain of nudt6
24	c2kdvA	Alignment	not modelled	99.7	19	PDB header: hydrolase Chain: A: PDB Molecule: rna pyrophosphohydrolase; PDBTitle: solution structure of rna pyrophosphohydrolase rpph from2 escherichia coli
25	c3gg6A	Alignment	not modelled	99.6	15	PDB header: hydrolase Chain: A: PDB Molecule: nucleoside diphosphate-linked moiety x motif 18; PDBTitle: crystal structure of the nudix domain of human nudt18
26	d2azwa1	Alignment	not modelled	99.6	18	Fold: Nudix Superfamily: Nudix Family: MutT-like
27	c3cngC	Alignment	not modelled	99.6	17	PDB header: hydrolase Chain: C: PDB Molecule: nudix hydrolase; PDBTitle: crystal structure of nudix hydrolase from nitrosomonas europaea
28	d1ktga	Alignment	not modelled	99.6	11	Fold: Nudix Superfamily: Nudix Family: MutT-like

29	c3fjyB_	Alignment	not modelled	99.6	18	PDB header: hydrolase Chain: B: PDB Molecule: probable mutt1 protein; PDBTitle: crystal structure of a probable mutt1 protein from bifidobacterium2 adolescentis
30	c2r5wA_	Alignment	not modelled	99.6	13	PDB header: hydrolase, transferase Chain: A: PDB Molecule: nicotinamide-nucleotide adenyltransferase; PDBTitle: crystal structure of a bifunctional nm2 adenyltransferase/adp ribose pyrophosphatase from3 francisella tularensis
31	c3id9B_	Alignment	not modelled	99.6	19	PDB header: hydrolase Chain: B: PDB Molecule: mutt/nudix family protein; PDBTitle: crystal structure of a mutt/nudix family protein from2 bacillus thuringiensis
32	d1iryA_	Alignment	not modelled	99.6	20	Fold: Nudix Superfamily: Nudix Family: MuTf-like
33	d1jkna_	Alignment	not modelled	99.6	17	Fold: Nudix Superfamily: Nudix Family: MuTf-like
34	c3i9xA_	Alignment	not modelled	99.6	17	PDB header: hydrolase Chain: A: PDB Molecule: mutt/nudix family protein; PDBTitle: crystal structure of a mutt/nudix family protein from listeria innocua
35	d1vcda1	Alignment	not modelled	99.6	20	Fold: Nudix Superfamily: Nudix Family: MuTf-like
36	c3hhjA_	Alignment	not modelled	99.6	17	PDB header: hydrolase Chain: A: PDB Molecule: mutator mutt protein; PDBTitle: crystal structure of mutator mutt from bartonella henselae
37	c2pq1B_	Alignment	not modelled	99.6	23	PDB header: hydrolase Chain: B: PDB Molecule: ap4a hydrolase; PDBTitle: crystal structure of ap4a hydrolase complexed with amp and2 atp (aq_158) from aquifex aeolicus vf5
38	c3grnB_	Alignment	not modelled	99.6	18	PDB header: hydrolase Chain: B: PDB Molecule: mutt related protein; PDBTitle: crystal structure of mutt protein from methanosarcina mazei go1
39	c3o8sA_	Alignment	not modelled	99.6	13	PDB header: hydrolase Chain: A: PDB Molecule: adp-ribose pyrophosphatase; PDBTitle: crystal structure of an adp-ribose pyrophosphatase (ssu98_1448) from2 streptococcus suis 89-1591 at 2.27 a resolution
40	d1ryaa_	Alignment	not modelled	99.6	11	Fold: Nudix Superfamily: Nudix Family: GDP-mannose mannosyl hydrolase NudD
41	c3gz8C_	Alignment	not modelled	99.6	16	PDB header: dna binding protein Chain: C: PDB Molecule: mutt/nudix family protein; PDBTitle: cocrystal structure of nudix domain of shewanella oneidensis2 ntrr complexed with adp ribose
42	c3gwyA_	Alignment	not modelled	99.6	16	PDB header: hydrolase Chain: A: PDB Molecule: putative ctp pyrophosphohydrolase; PDBTitle: crystal structure of putative ctp pyrophosphohydrolase from2 bacteroides fragilis
43	c3sonB_	Alignment	not modelled	99.6	11	PDB header: hydrolase Chain: B: PDB Molecule: hypothetical nudix hydrolase; PDBTitle: crystal structure of a hypothetical nudix hydrolase (lmof2365_2679)2 from listeria monocytogenes (atcc 19115) at 1.70 a resolution
44	c2qkmF_	Alignment	not modelled	99.6	14	PDB header: hydrolase Chain: F: PDB Molecule: spac19a8.12 protein; PDBTitle: the crystal structure of fission yeast mrna decapping enzyme dcp1-dcp22 complex
45	c3exqA_	Alignment	not modelled	99.6	14	PDB header: hydrolase Chain: A: PDB Molecule: nudix family hydrolase; PDBTitle: crystal structure of a nudix family hydrolase from2 lactobacillus brevis
46	c2qjoB_	Alignment	not modelled	99.6	11	PDB header: transferase, hydrolase Chain: B: PDB Molecule: bifunctional nm2 adenyltransferase/nudix hydrolase; PDBTitle: crystal structure of a bifunctional nm2 adenyltransferase/adp ribose2 pyrophosphatase (nadm) complexed with adprp and nad from3 synechocystis sp.
47	d2b06a1	Alignment	not modelled	99.6	19	Fold: Nudix Superfamily: Nudix Family: MuTf-like
48	c3e57A_	Alignment	not modelled	99.5	13	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein tm1382; PDBTitle: crystal structure of tm1382, a putative nudix hydrolase
49	d2fb1a2	Alignment	not modelled	99.5	9	Fold: Nudix Superfamily: Nudix Family: BT0354 N-terminal domain-like
50	c3fcmA_	Alignment	not modelled	99.5	19	PDB header: hydrolase Chain: A: PDB Molecule: hydrolase, nudix family; PDBTitle: crystal structure of a nudix hydrolase from clostridium2 perfringens
51	d1xsba_	Alignment	not modelled	99.5	14	Fold: Nudix Superfamily: Nudix Family: MuTf-like
52	d1ppva_	Alignment	not modelled	99.5	13	Fold: Nudix Superfamily: Nudix Family: IPP isomerase-like
53	d1puna_	Alignment	not modelled	99.5	15	Fold: Nudix Superfamily: Nudix Family: MuTf-like

54	c2yyhC	Alignment	not modelled	99.5	19	PDB header: hydrolase Chain: C: PDB Molecule: 8-oxo-dgtpase domain; PDBTitle: crystal structure of nudix family protein from aquifex aeolicus
55	c3q4iA	Alignment	not modelled	99.5	17	PDB header: hydrolase Chain: A: PDB Molecule: phosphohydrolase (mutt/nudix family protein); PDBTitle: crystal structure of cdp-chase in complex with gd3+
56	c3ef5A	Alignment	not modelled	99.5	18	PDB header: hydrolase Chain: A: PDB Molecule: probable pyrophosphohydrolase; PDBTitle: structure of the rna pyrophosphohydrolase bdrpph in complex with dgtp
57	c3r03B	Alignment	not modelled	99.5	23	PDB header: hydrolase Chain: B: PDB Molecule: nudix hydrolase; PDBTitle: the crystal structure of nudix hydrolase from rhodospirillum rubrum
58	d1hzta	Alignment	not modelled	99.5	15	Fold: Nudix Superfamily: Nudix Family: IPP isomerase-like
59	c3fk9B	Alignment	not modelled	99.5	15	PDB header: hydrolase Chain: B: PDB Molecule: mutator mutt protein; PDBTitle: crystal structure of nmutator mutt protein from bacillus2 halodurans
60	c3n77B	Alignment	not modelled	99.5	17	PDB header: hydrolase Chain: B: PDB Molecule: nucleoside triphosphatase nudi; PDBTitle: crystal structure of idp01880, putative ntp pyrophosphohydrolase of2 salmonella typhimurium lt2
61	c3dupB	Alignment	not modelled	99.5	14	PDB header: hydrolase Chain: B: PDB Molecule: mutt/nudix family protein; PDBTitle: crystal structure of mutt/nudix family hydrolase from rhodospirillum2 rubrum atcc 11170
62	c2pqvA	Alignment	not modelled	99.4	14	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: mutt/nudix family protein; PDBTitle: crystal structure of mutt/nudix family protein from streptococcus2 pneumoniae
63	c3f6aA	Alignment	not modelled	99.4	20	PDB header: hydrolase Chain: A: PDB Molecule: hydrolase, nudix family; PDBTitle: crystal structure of a hydrolase, nudix family from2 clostridium perfringens
64	c3gz6A	Alignment	not modelled	99.4	16	PDB header: dna binding protein/dna Chain: A: PDB Molecule: mutt/nudix family protein; PDBTitle: crystal structure of shewanella oneidensis nrtr complexed2 with a 27mer dna
65	d1k2ea	Alignment	not modelled	99.4	16	Fold: Nudix Superfamily: Nudix Family: MuTT-like
66	c2fb1A	Alignment	not modelled	99.3	12	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: conserved hypothetical protein; PDBTitle: crystal structure of protein bt0354 from bacteroides thetaiotaomicron
67	d2fmla2	Alignment	not modelled	99.3	17	Fold: Nudix Superfamily: Nudix Family: BT0354 N-terminal domain-like
68	c3edsA	Alignment	not modelled	99.3	23	PDB header: hydrolase Chain: A: PDB Molecule: mutt/nudix family protein; PDBTitle: crystal structure of a mut/nudix family protein from bacillus2 thuringiensis
69	c3f13A	Alignment	not modelled	99.3	17	PDB header: hydrolase Chain: A: PDB Molecule: putative nudix hydrolase family member; PDBTitle: crystal structure of putative nudix hydrolase family member2 from chromobacterium violaceum
70	c2i6kA	Alignment	not modelled	99.2	14	PDB header: isomerase Chain: A: PDB Molecule: isopentenyl-diphosphate delta-isomerase 1; PDBTitle: crystal structure of human type i ipp isomerase complexed2 with a substrate analog
71	c3rh7A	Alignment	not modelled	99.2	11	PDB header: oxidoreductase Chain: A: PDB Molecule: hypothetical oxidoreductase; PDBTitle: crystal structure of a hypothetical oxidoreductase (sma0793) from2 sinorhizobium meliloti 1021 at 3.00 a resolution
72	c3qsiA	Alignment	not modelled	99.1	25	PDB header: hydrolase Chain: A: PDB Molecule: nudix hydrolase; PDBTitle: crystal structure of nudix hydrolase from alicyclobacillus2 acidocaldarius
73	c2fmlB	Alignment	not modelled	99.1	17	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: mutt/nudix family protein; PDBTitle: crystal structure of mutt/nudix family protein from enterococcus2 faecalis
74	c2pnyA	Alignment	not modelled	99.1	14	PDB header: isomerase Chain: A: PDB Molecule: isopentenyl-diphosphate delta-isomerase 2; PDBTitle: structure of human isopentenyl-diphosphate delta-isomerase 2
75	d1x51a1	Alignment	not modelled	99.1	11	Fold: Nudix Superfamily: Nudix Family: MuTY C-terminal domain-like
76	d1u20a1	Alignment	not modelled	99.1	22	Fold: Nudix Superfamily: Nudix Family: MuTT-like
77	d1q33a	Alignment	not modelled	99.0	12	Fold: Nudix Superfamily: Nudix Family: MuTT-like
78	c1rrqA	Alignment	not modelled	98.8	10	PDB header: hydrolase/dna Chain: A: PDB Molecule: muty; PDBTitle: muty adenine glycosylase in complex with dna containing an2 a:oxog pair
79	c2i8aB	Alignment	not modelled	98.8	13	PDB header: nuclear protein Chain: B: PDB Molecule: cleavage and polyadenylation specificity factor 5;

79	c2jbqB_	Alignment	not modelled	98.8	13	PDBTitle: crystal structure of human cleavage and polyadenylation2 specificity factor 5 (cpsf5) in complex with a sulphate3 ion.
80	d1rrqa2	Alignment	not modelled	98.7	10	Fold: Nudix Superfamily: Nudix Family: MutY C-terminal domain-like
81	c3couA_	Alignment	not modelled	98.1	27	PDB header: hydrolase Chain: A: PDB Molecule: nucleoside diphosphate-linked moiety x motif 16; PDBTitle: crystal structure of human nudix motif 16 (nudt16)
82	c3kvhA_	Alignment	not modelled	97.5	19	PDB header: rna binding protein Chain: A: PDB Molecule: protein syndesmos; PDBTitle: crystal structure of human protein syndesmos (nudt16-like protein)
83	c3p5tE_	Alignment	not modelled	78.0	12	PDB header: rna binding protein Chain: E: PDB Molecule: cleavage and polyadenylation specificity factor subunit 5; PDBTitle: cfim25-cfim68 complex
84	c3pjyB_	Alignment	not modelled	22.0	22	PDB header: transcription regulator Chain: B: PDB Molecule: hypothetical signal peptide protein; PDBTitle: crystal structure of a putative transcription regulator (r01717) from2 sinorhizobium meliloti 1021 at 1.55 a resolution
85	c3m7aA_	Alignment	not modelled	18.3	19	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of saro_0823 (yp_496102.1) a protein of2 unknown function from novosphingobium aromaticivorans dsm312444 at 1.22 a resolution
86	c3pppA_	Alignment	not modelled	9.2	15	PDB header: transport protein Chain: A: PDB Molecule: glycine betaine/carnitine/choline-binding protein; PDBTitle: structures of the substrate-binding protein provide insights into the2 multiple compatible solutes binding specificities of bacillus3 subtilis abc transporter opuc
87	d2dw4a1	Alignment	not modelled	8.2	23	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: SWIRM domain
88	d2p12a1	Alignment	not modelled	7.9	17	Fold: FomD barrel-like Superfamily: FomD-like Family: FomD-like
89	c2hkoA_	Alignment	not modelled	7.6	22	PDB header: oxidoreductase Chain: A: PDB Molecule: lysine-specific histone demethylase 1; PDBTitle: crystal structure of lsd1
90	d2fug21	Alignment	not modelled	7.1	18	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: NQO2-like
91	c2xagA_	Alignment	not modelled	7.1	22	PDB header: transcription Chain: A: PDB Molecule: lysine-specific histone demethylase 1; PDBTitle: crystal structure of lsd1-corest in complex with para-bromo-2 (-)-trans-2-phenylcyclopropyl-1-amine
92	c2v1dA_	Alignment	not modelled	7.1	22	PDB header: oxidoreductase/repressor Chain: A: PDB Molecule: lysine-specific histone demethylase 1; PDBTitle: structural basis of lsd1-corest selectivity in histone h32 recognition
93	c2hf6A_	Alignment	not modelled	6.8	10	PDB header: protein transport Chain: A: PDB Molecule: coatomer subunit zeta-1; PDBTitle: solution structure of human zeta-cop
94	c3d0wD_	Alignment	not modelled	6.6	14	PDB header: structural genomics, unknown function Chain: D: PDB Molecule: yflh protein; PDBTitle: crystal structure of yflh protein from bacillus subtilis.2 northeast structural genomics consortium target sr326
95	d1gw5s_	Alignment	not modelled	6.0	21	Fold: Profilin-like Superfamily: SNARE-like Family: Clathrin coat assembly domain
96	d1bm8a_	Alignment	not modelled	5.8	14	Fold: DNA-binding domain of Mlu1-box binding protein MBP1 Superfamily: DNA-binding domain of Mlu1-box binding protein MBP1 Family: DNA-binding domain of Mlu1-box binding protein MBP1
97	d1wgga_	Alignment	not modelled	5.6	21	Fold: beta-Grasp (ubiquitin-like) Superfamily: Ubiquitin-like Family: Ubiquitin-related
98	d1l3ga_	Alignment	not modelled	5.5	16	Fold: DNA-binding domain of Mlu1-box binding protein MBP1 Superfamily: DNA-binding domain of Mlu1-box binding protein MBP1 Family: DNA-binding domain of Mlu1-box binding protein MBP1
99	d1v86a_	Alignment	not modelled	5.4	10	Fold: beta-Grasp (ubiquitin-like) Superfamily: Ubiquitin-like Family: Ubiquitin-related