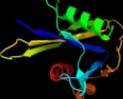
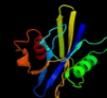
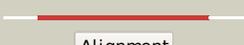
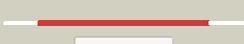


Phyre2

Email	I.a.kelley@imperial.ac.uk
Description	P77788
Date	Thu Jan 5 12:32:50 GMT 2012
Unique Job ID	0cf9b44c597cc406

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d1puna_	 Alignment		100.0	31	Fold: Nudix Superfamily: Nudix Family: MutT-like
2	c3gwyA_	 Alignment		100.0	36	PDB header: hydrolase Chain: A: PDB Molecule: putative ctp pyrophosphohydrolase; PDBTitle: crystal structure of putative ctp pyrophosphohydrolase from2 bacteroides fragilis
3	c3ef5A_	 Alignment		100.0	37	PDB header: hydrolase Chain: A: PDB Molecule: probable pyrophosphohydrolase; PDBTitle: structure of the rna pyrophosphohydrolase bdrpph in complex with dgtp
4	c3hhjA_	 Alignment		99.9	33	PDB header: hydrolase Chain: A: PDB Molecule: mutator mutt protein; PDBTitle: crystal structure of mutator mutt from bartonella henselae
5	c3grnB_	 Alignment		99.9	30	PDB header: hydrolase Chain: B: PDB Molecule: mutt related protein; PDBTitle: crystal structure of mutt protein from methanosarcina mazei go1
6	c3exqA_	 Alignment		99.9	18	PDB header: hydrolase Chain: A: PDB Molecule: nudix family hydrolase; PDBTitle: crystal structure of a nudix family hydrolase from2 lactobacillus brevis
7	d1vk6a2	 Alignment		99.9	24	Fold: Nudix Superfamily: Nudix Family: NADH pyrophosphatase
8	c3n77B_	 Alignment		99.9	27	PDB header: hydrolase Chain: B: PDB Molecule: nucleoside triphosphatase nudi; PDBTitle: crystal structure of idp01880, putative ntp pyrophosphohydrolase of2 salmonella typhimurium lt2
9	c2gb5B_	 Alignment		99.9	24	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
10	d1lrya_	 Alignment		99.9	19	Fold: Nudix Superfamily: Nudix Family: MutT-like
11	c3r03B_	 Alignment		99.9	39	PDB header: hydrolase Chain: B: PDB Molecule: nudix hydrolase; PDBTitle: the crystal structure of nudix hydrolase from rhodospirillum rubrum

12	c2pq1B_	Alignment		99.9	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
13	d2b06a1	Alignment		99.9	25	Fold: Nudix Superfamily: Nudix Family: MuT-like
14	c3cngC_	Alignment		99.9	22	PDB header: hydrolase Chain: C: PDB Molecule: nudix hydrolase; PDBTitle: crystal structure of nudix hydrolase from nitrosomonas europaea
15	c3fk9B_	Alignment		99.9	25	PDB header: hydrolase Chain: B: PDB Molecule: mutator mutt protein; PDBTitle: crystal structure of mmutator mutt protein from bacillus2 halodurans
16	d2b0va1	Alignment		99.9	24	Fold: Nudix Superfamily: Nudix Family: MuT-like
17	c1rrqA_	Alignment		99.9	17	PDB header: hydrolase/dna Chain: A: PDB Molecule: muty; PDBTitle: muty adenine glycosylase in complex with dna containing an2 a:oxog pair
18	c3dkuB_	Alignment		99.9	25	PDB header: hydrolase Chain: B: PDB Molecule: putative phosphohydrolase; PDBTitle: crystal structure of nudix hydrolase orf153, ymfb, from2 escherichia coli k-1
19	d1vcda1	Alignment		99.9	27	Fold: Nudix Superfamily: Nudix Family: MuT-like
20	c3h95A_	Alignment		99.9	18	PDB header: gene regulation Chain: A: PDB Molecule: nucleoside diphosphate-linked moiety x motif 6; PDBTitle: crystal structure of the nudix domain of nudt6
21	d1rrqa2	Alignment	not modelled	99.9	16	Fold: Nudix Superfamily: Nudix Family: MuTY C-terminal domain-like
22	c3o8sA_	Alignment	not modelled	99.9	25	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
23	d2fkba1	Alignment	not modelled	99.9	23	Fold: Nudix Superfamily: Nudix Family: IPP isomerase-like
24	c3gz8C_	Alignment	not modelled	99.9	22	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
25	c3q4iA_	Alignment	not modelled	99.9	18	PDB header: hydrolase Chain: A: PDB Molecule: phosphohydrolase (mutt/nudix family protein); PDBTitle: crystal structure of cdp-chase in complex with gd3+
26	c3gg6A_	Alignment	not modelled	99.9	21	PDB header: hydrolase Chain: A: PDB Molecule: nucleoside diphosphate-linked moiety x motif 18; PDBTitle: crystal structure of the nudix domain of human nudt18
27	d1x51a1	Alignment	not modelled	99.9	17	Fold: Nudix Superfamily: Nudix Family: MuTY C-terminal domain-like
28	d2azwa1	Alignment	not modelled	99.9	19	Fold: Nudix Superfamily: Nudix Family: MuT-like

29	c3fybB	Alignment	not modelled	99.9	26	PDB header: hydrolase Chain: B: PDB Molecule: probable mutt1 protein; PDBTitle: crystal structure of a probable mutt1 protein from bifidobacterium2 adolescentis
30	d1k2ea	Alignment	not modelled	99.9	19	Fold: Nudix Superfamily: Nudix Family: MuTf-like
31	c2yyhC	Alignment	not modelled	99.9	19	PDB header: hydrolase Chain: C: PDB Molecule: 8-oxo-dgtpase domain; PDBTitle: crystal structure of nudix family protein from aquifex aeolicus
32	c2kdvA	Alignment	not modelled	99.9	23	PDB header: hydrolase Chain: A: PDB Molecule: rna pyrophosphohydrolase; PDBTitle: solution structure of rna pyrophosphohydrolase rpqh from2 escherichia coli
33	d1ryaa	Alignment	not modelled	99.9	18	Fold: Nudix Superfamily: Nudix Family: GDP-mannose mannosyl hydrolase NudD
34	c2qjoB	Alignment	not modelled	99.9	18	PDB header: transferase, hydrolase Chain: B: PDB Molecule: bifunctional nmh adenyltransferase/nudix hydrolase; PDBTitle: crystal structure of a bifunctional nmh adenyltransferase/adp ribose2 pyrophosphatase (nadm) complexed with adprp and nad from3 synechocystis sp.
35	c2o1cB	Alignment	not modelled	99.9	23	PDB header: hydrolase Chain: B: PDB Molecule: datp pyrophosphohydrolase; PDBTitle: structure of the e. coli dihydroneopterin triphosphate2 pyrophosphohydrolase
36	d2fb1a2	Alignment	not modelled	99.9	18	Fold: Nudix Superfamily: Nudix Family: BT0354 N-terminal domain-like
37	d1ktga	Alignment	not modelled	99.9	27	Fold: Nudix Superfamily: Nudix Family: MuTf-like
38	d1sjya	Alignment	not modelled	99.8	24	Fold: Nudix Superfamily: Nudix Family: MuTf-like
39	d2fvva1	Alignment	not modelled	99.8	20	Fold: Nudix Superfamily: Nudix Family: MuTf-like
40	c2fvvA	Alignment	not modelled	99.8	20	PDB header: hydrolase Chain: A: PDB Molecule: diphosphoinositol polyphosphate phosphohydrolase PDBTitle: human diphosphoinositol polyphosphate phosphohydrolase 1
41	c3rh7A	Alignment	not modelled	99.8	18	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
42	c3i9xA	Alignment	not modelled	99.8	22	PDB header: hydrolase Chain: A: PDB Molecule: mutt/nudix family protein; PDBTitle: crystal structure of a mutt/nudix family protein from listeria innocua
43	d1xsba	Alignment	not modelled	99.8	25	Fold: Nudix Superfamily: Nudix Family: MuTf-like
44	c2r5wA	Alignment	not modelled	99.8	23	PDB header: hydrolase, transferase Chain: A: PDB Molecule: nicotinamide-nucleotide adenyltransferase; PDBTitle: crystal structure of a bifunctional nmh2 adenyltransferase/adp ribose pyrophosphatase from3 francisella tularensis
45	c2pqvA	Alignment	not modelled	99.8	24	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
46	c3gz6A	Alignment	not modelled	99.8	22	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
47	d1vhza	Alignment	not modelled	99.8	19	Fold: Nudix Superfamily: Nudix Family: MuTf-like
48	c2jvbA	Alignment	not modelled	99.8	22	PDB header: hydrolase Chain: A: PDB Molecule: mrna-decapping enzyme subunit 2; PDBTitle: solution structure of catalytic domain of ydcp2
49	c2fb1A	Alignment	not modelled	99.8	18	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: conserved hypothetical protein; PDBTitle: crystal structure of protein bt0354 from bacteroides thetaotaomicron
50	c3f6aA	Alignment	not modelled	99.8	21	PDB header: hydrolase Chain: A: PDB Molecule: hydrolase, nudix family; PDBTitle: crystal structure of a hydrolase, nudix family from2 clostridium perfringens
51	c3fcmA	Alignment	not modelled	99.8	18	PDB header: hydrolase Chain: A: PDB Molecule: hydrolase, nudix family; PDBTitle: crystal structure of a nudix hydrolase from clostridium2 perfringens
52	d1jkna	Alignment	not modelled	99.8	20	Fold: Nudix Superfamily: Nudix Family: MuTf-like
53	c3sonB	Alignment	not modelled	99.8	20	PDB header: hydrolase Chain: B: PDB Molecule: hypothetical nudix hydrolase; PDBTitle: crystal structure of a hypothetical nudix hydrolase (lmo2365_2679)2 from listeria monocytogenes (atcc 19115) at 1.70 a resolution

54	c2w4eA_	Alignment	not modelled	99.8	21	PDB header: hydrolase Chain: A: PDB Molecule: mutt/nudix family protein; PDBTitle: structure of an n-terminally truncated nudix hydrolase2 dr2204 from deinococcus radiodurans
55	c3id9B_	Alignment	not modelled	99.8	21	PDB header: hydrolase Chain: B: PDB Molecule: mutt/nudix family protein; PDBTitle: crystal structure of a mutt/nudix family protein from2 bacillus thuringiensis
56	c3f13A_	Alignment	not modelled	99.8	23	PDB header: hydrolase Chain: A: PDB Molecule: putative nudix hydrolase family member; PDBTitle: crystal structure of putative nudix hydrolase family member2 from chromobacterium violaceum
57	d1ppva_	Alignment	not modelled	99.8	20	Fold: Nudix Superfamily: Nudix Family: IPP isomerase-like
58	d1hzta_	Alignment	not modelled	99.8	20	Fold: Nudix Superfamily: Nudix Family: IPP isomerase-like
59	c2yvoA_	Alignment	not modelled	99.8	24	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
60	d2a6ta2	Alignment	not modelled	99.8	17	Fold: Nudix Superfamily: Nudix Family: mRNA decapping enzyme-like
61	c3edsA_	Alignment	not modelled	99.8	24	PDB header: hydrolase Chain: A: PDB Molecule: mutt/nudix family protein; PDBTitle: crystal structure of a mut/nudix family protein from bacillus2 thuringiensis
62	d1v8ya_	Alignment	not modelled	99.8	28	Fold: Nudix Superfamily: Nudix Family: MutT-like
63	d1nqza_	Alignment	not modelled	99.8	23	Fold: Nudix Superfamily: Nudix Family: MutT-like
64	c2qkmF_	Alignment	not modelled	99.8	20	PDB header: hydrolase Chain: F: PDB Molecule: spac19a8.12 protein; PDBTitle: the crystal structure of fission yeast mrna decapping enzyme dcp1-dcp22 complex
65	d1g0sa_	Alignment	not modelled	99.8	22	Fold: Nudix Superfamily: Nudix Family: MutT-like
66	d2fmla2	Alignment	not modelled	99.8	19	Fold: Nudix Superfamily: Nudix Family: BT0354 N-terminal domain-like
67	c3bm4B_	Alignment	not modelled	99.8	19	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
68	d1mqea_	Alignment	not modelled	99.8	20	Fold: Nudix Superfamily: Nudix Family: MutT-like
69	d2o5fa1	Alignment	not modelled	99.7	23	Fold: Nudix Superfamily: Nudix Family: IPP isomerase-like
70	c2fmlB_	Alignment	not modelled	99.7	19	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
71	c3e57A_	Alignment	not modelled	99.7	14	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein tm1382; PDBTitle: crystal structure of tm1382, a putative nudix hydrolase
72	c2i6kA_	Alignment	not modelled	99.7	19	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
73	c2pnyA_	Alignment	not modelled	99.7	18	PDB header: isomerase Chain: A: PDB Molecule: isopentenyl-diphosphate delta-isomerase 2; PDBTitle: structure of human isopentenyl-diphosphate delta-isomerase 2
74	d1viua_	Alignment	not modelled	99.7	16	Fold: Nudix Superfamily: Nudix Family: MutT-like
75	c3q91D_	Alignment	not modelled	99.6	16	PDB header: hydrolase Chain: D: PDB Molecule: uridine diphosphate glucose pyrophosphatase; PDBTitle: crystal structure of human uridine diphosphate glucose pyrophosphatase2 (nudt14)
76	d1q33a_	Alignment	not modelled	99.6	21	Fold: Nudix Superfamily: Nudix Family: MutT-like
77	c3dupB_	Alignment	not modelled	99.5	15	PDB header: hydrolase Chain: B: PDB Molecule: mutt/nudix family protein; PDBTitle: crystal structure of mutt/nudix family hydrolase from rhodospirillum2 rubrum atcc 11170
78	c3qsjA_	Alignment	not modelled	99.4	27	PDB header: hydrolase Chain: A: PDB Molecule: nudix hydrolase; PDBTitle: crystal structure of nudix hydrolase from alicyclobacillus2 acidocaldarius
79	c2j8qB_	Alignment	not modelled	99.4	21	PDB header: nuclear protein Chain: B: PDB Molecule: cleavage and polyadenylation specificity factor 5; PDBTitle: crystal structure of human cleavage and

						polyadenylation2 specificity factor 5 (cpsf5) in complex with a sulphate3 ion.
80	d1u20a1	Alignment	not modelled	99.4	21	Fold: Nudix Superfamily: Nudix Family: MuT-like
81	c3couA	Alignment	not modelled	98.7	32	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	97.9	27	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	97.0	22	PDB header: rna binding protein Chain: E: PDB Molecule: cleavage and polyadenylation specificity factor subunit 5; PDBTitle: cfim25-cfim68 complex
84	c2vldA	Alignment	not modelled	16.0	31	PDB header: hydrolase Chain: A: PDB Molecule: upf0286 protein pyrab01260; PDBTitle: crystal structure of a repair endonuclease from pyrococcus2 abyssi
85	c3enoB	Alignment	not modelled	15.2	19	PDB header: hydrolase/unknown function Chain: B: PDB Molecule: putative o-sialoglycoprotein endopeptidase; PDBTitle: crystal structure of pyrococcus furiosus pcc1 in complex2 with thermoplasma acidophilum kae1
86	c1zvwA	Alignment	not modelled	12.5	21	PDB header: transferase Chain: A: PDB Molecule: lipoamide acyltransferase component of branched- PDBTitle: solution structure of the subunit binding domain (hbsbd) of2 the human mitochondrial branched-chain alpha-ketoacid3 dehydrogenase
87	c3fpvC	Alignment	not modelled	12.3	27	PDB header: heme binding protein Chain: C: PDB Molecule: extracellular haem-binding protein; PDBTitle: crystal structure of hbps
88	d2a2la1	Alignment	not modelled	9.5	36	Fold: Profilin-like Superfamily: GlcG-like Family: GlcG-like
89	c2ivoC	Alignment	not modelled	8.2	16	PDB header: hydrolase Chain: C: PDB Molecule: up1; PDBTitle: structure of up1 protein
90	d1nc7a	Alignment	not modelled	6.8	27	Fold: Hypothetical protein TM1070 Superfamily: Hypothetical protein TM1070 Family: Hypothetical protein TM1070
91	d2dexx3	Alignment	not modelled	5.7	26	Fold: Pentain, beta/alpha-propeller Superfamily: Pentain Family: Peptidylarginine deiminase Pad4, catalytic C-terminal domain
92	c3kngA	Alignment	not modelled	5.5	22	PDB header: oxidoreductase Chain: A: PDB Molecule: snoab; PDBTitle: crystal structure of snoab, a cofactor-independent oxygenase2 from streptomyces nogalater, determined to 1.9 resolution
93	c2eq8C	Alignment	not modelled	5.4	35	PDB header: oxidoreductase Chain: C: PDB Molecule: pyruvate dehydrogenase complex, dihydrolipoamide PDBTitle: crystal structure of lipoamide dehydrogenase from thermus thermophilus2 hb8 with psbdp