



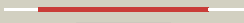

























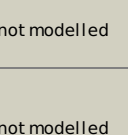


Phyre2

Email	l.a.kelley@imperial.ac.uk
Description	Q93K97
Date	Thu Jan 5 12:37:43 GMT 2012
Unique Job ID	46fdb5ab76a2e1f2

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d1g0sa_	 Alignment		100.0	99	Fold: Nudix Superfamily: Nudix Family: MutT-like
2	d1viua_	 Alignment		100.0	30	Fold: Nudix Superfamily: Nudix Family: MutT-like
3	d1vhza_	 Alignment		100.0	22	Fold: Nudix Superfamily: Nudix Family: MutT-like
4	c3bm4B_	 Alignment		100.0	20	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	c2yv0A_	 Alignment		100.0	26	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
6	d1mqea_	 Alignment		100.0	25	Fold: Nudix Superfamily: Nudix Family: MutT-like
7	c3q91D_	 Alignment		100.0	28	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	31	Fold: Nudix Superfamily: Nudix Family: MutT-like
9	c2w4eA_	 Alignment		100.0	26	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	24	Fold: Nudix Superfamily: Nudix Family: MutT-like
11	d1vk6a2	 Alignment		99.8	19	Fold: Nudix Superfamily: Nudix Family: NADH pyrophosphatase

12	c2jvbA_	Alignment		99.8	15	PDB header: hydrolase Chain: A: PDB Molecule: mrna-decapping enzyme subunit 2; PDBTitle: solution structure of catalytic domain of ydcp2
13	d2o5fa1	Alignment		99.8	18	Fold: Nudix Superfamily: Nudix Family: IPP isomerase-like
14	d2fkba1	Alignment		99.8	18	Fold: Nudix Superfamily: Nudix Family: IPP isomerase-like
15	d1nqza_	Alignment		99.8	15	Fold: Nudix Superfamily: Nudix Family: MutT-like
16	c2gb5B_	Alignment		99.8	17	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
17	d2b0va1	Alignment		99.8	17	Fold: Nudix Superfamily: Nudix Family: MutT-like
18	c3dkuB_	Alignment		99.8	14	PDB header: hydrolase Chain: B: PDB Molecule: putative phosphohydrolase; PDBTitle: crystal structure of nudix hydrolase orf153, ymfB, from2 escherichia coli k-1
19	c2o1cB_	Alignment		99.8	18	PDB header: hydrolase Chain: B: PDB Molecule: datp pyrophosphohydrolase; PDBTitle: structure of the e. coli dihydroneopterin triphosphate2 pyrophosphohydrolase
20	c2kdvA_	Alignment		99.7	19	PDB header: hydrolase Chain: A: PDB Molecule: rna pyrophosphohydrolase; PDBTitle: solution structure of rna pyrophosphohydrolase rpph from2 escherichia coli
21	d2a6ta2	Alignment	not modelled	99.7	16	Fold: Nudix Superfamily: Nudix Family: mRNA decapping enzyme-like
22	c2r5wA_	Alignment	not modelled	99.7	13	PDB header: hydrolase, transferase Chain: A: PDB Molecule: nicotinamide-nucleotide adenylyltransferase; PDBTitle: crystal structure of a bifunctional nm2 adenylyltransferase/adp ribose pyrophosphatase from3 francisella tularensis
23	c3h95A_	Alignment	not modelled	99.7	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
24	c2fvvA_	Alignment	not modelled	99.7	21	PDB header: hydrolase Chain: A: PDB Molecule: diphosphoinositol polyphosphate phosphohydrolase PDBTitle: human diphosphoinositol polyphosphate phosphohydrolase 1
25	d2fvva1	Alignment	not modelled	99.7	21	Fold: Nudix Superfamily: Nudix Family: MutT-like
26	d1ppva_	Alignment	not modelled	99.7	11	Fold: Nudix Superfamily: Nudix Family: IPP isomerase-like
27	d1ktga_	Alignment	not modelled	99.7	17	Fold: Nudix Superfamily: Nudix Family: MutT-like
28	c3cngC_	Alignment	not modelled	99.7	16	PDB header: hydrolase Chain: C: PDB Molecule: nudix hydrolase; PDBTitle: crystal structure of nudix hydrolase from nitrosomonas

					europaea
29	c3sonB_	Alignment	not modelled	99.7	24 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
30	dlryaa_	Alignment	not modelled	99.7	12 Fold: Nudix Superfamily: Nudix Family: GDP-mannose mannosyl hydrolase NudD
31	c2pq1B_	Alignment	not modelled	99.7	20 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
32	c3grnB_	Alignment	not modelled	99.7	14 PDB header: hydrolase Chain: B: PDB Molecule: mutt related protein; PDBTitle: crystal structure of mutt protein from methanosarcina mazei go1
33	dlvcda1	Alignment	not modelled	99.7	24 Fold: Nudix Superfamily: Nudix Family: MutT-like
34	d2azwa1	Alignment	not modelled	99.7	19 Fold: Nudix Superfamily: Nudix Family: MutT-like
35	dlhzta_	Alignment	not modelled	99.7	11 Fold: Nudix Superfamily: Nudix Family: IPP isomerase-like
36	c3hhjA_	Alignment	not modelled	99.7	20 PDB header: hydrolase Chain: A: PDB Molecule: mutator mutt protein; PDBTitle: crystal structure of mutator mutt from bartonella henselae
37	dlirya_	Alignment	not modelled	99.7	26 Fold: Nudix Superfamily: Nudix Family: MutT-like
38	c3gg6A_	Alignment	not modelled	99.7	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
39	c2qjoB_	Alignment	not modelled	99.7	14 PDB header: transferase, hydrolase Chain: B: PDB Molecule: bifunctional nmh adenylyltransferase/nudix hydrolase; PDBTitle: crystal structure of a bifunctional nmh adenylyltransferase/adp ribose2 pyrophosphatase (nadm) complexed with adprp and nad from3 synechocystis sp.
40	c3fjyB_	Alignment	not modelled	99.7	24 PDB header: hydrolase Chain: B: PDB Molecule: probable mutt1 protein; PDBTitle: crystal structure of a probable mutt1 protein from bifidobacterium2 adolescentis
41	c3o8sA_	Alignment	not modelled	99.7	15 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
42	c3i9xA_	Alignment	not modelled	99.7	15 PDB header: hydrolase Chain: A: PDB Molecule: mutt/nudix family protein; PDBTitle: crystal structure of a mutt/nudix family protein from listeria innocua
43	c3gz8C_	Alignment	not modelled	99.7	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
44	c3id9B_	Alignment	not modelled	99.7	19 PDB header: hydrolase Chain: B: PDB Molecule: mutt/nudix family protein; PDBTitle: crystal structure of a mutt/nudix family protein from2 bacillus thuringiensis
45	dljkna_	Alignment	not modelled	99.7	19 Fold: Nudix Superfamily: Nudix Family: MutT-like
46	c3gwyA_	Alignment	not modelled	99.7	17 PDB header: hydrolase Chain: A: PDB Molecule: putative ctp pyrophosphohydrolase; PDBTitle: crystal structure of putative ctp pyrophosphohydrolase from2 bacteroides fragilis
47	d2fb1a2	Alignment	not modelled	99.7	15 Fold: Nudix Superfamily: Nudix Family: BT0354 N-terminal domain-like
48	c2qkmF_	Alignment	not modelled	99.7	16 PDB header: hydrolase Chain: F: PDB Molecule: spac19a8.12 protein; PDBTitle: the crystal structure of fission yeast mrna decapping enzyme dcp1-dcp22 complex
49	c3q4iA_	Alignment	not modelled	99.6	12 PDB header: hydrolase Chain: A: PDB Molecule: phosphohydrolase (mutt/nudix family protein); PDBTitle: crystal structure of cdp-chase in complex with gd3+
50	c3ef5A_	Alignment	not modelled	99.6	18 PDB header: hydrolase Chain: A: PDB Molecule: probable pyrophosphohydrolase; PDBTitle: structure of the rna pyrophosphohydrolase bdrpph in complex with dgtp
51	c3fcmA_	Alignment	not modelled	99.6	13 PDB header: hydrolase Chain: A: PDB Molecule: hydrolase, nudix family; PDBTitle: crystal structure of a nudix hydrolase from clostridium2 perfringens
52	c3fk9B_	Alignment	not modelled	99.6	19 PDB header: hydrolase Chain: B: PDB Molecule: mutator mutt protein; PDBTitle: crystal structure of mmutator mutt protein from bacillus2 halodurans
53	d2b06a1	Alignment	not modelled	99.6	20 Fold: Nudix Superfamily: Nudix Family: MutT-like

54	c2yyhC	Alignment	not modelled	99.6	25	PDB header: hydrolase Chain: C: PDB Molecule: 8-oxo-dgtpase domain; PDBTitle: crystal structure of nudix family protein from aquifex aeolicus
55	c3exqA	Alignment	not modelled	99.6	18	PDB header: hydrolase Chain: A: PDB Molecule: nudix family hydrolase; PDBTitle: crystal structure of a nudix family hydrolase from2 lactobacillus brevis
56	d1xsba	Alignment	not modelled	99.6	20	Fold: Nudix Superfamily: Nudix Family: MutT-like
57	d1puna	Alignment	not modelled	99.6	18	Fold: Nudix Superfamily: Nudix Family: MutT-like
58	c3r03B	Alignment	not modelled	99.6	21	PDB header: hydrolase Chain: B: PDB Molecule: nudix hydrolase; PDBTitle: the crystal structure of nudix hydrolase from rhodospirillum rubrum
59	c3e57A	Alignment	not modelled	99.6	12	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein tm1382; PDBTitle: crystal structure of tm1382, a putative nudix hydrolase
60	c3n77B	Alignment	not modelled	99.6	17	PDB header: hydrolase Chain: B: PDB Molecule: nucleoside triphosphatase nudi; PDBTitle: crystal structure of idp01880, putative ntp pyrophosphohydrolase of2 salmonella typhimurium lt2
61	c2pqvA	Alignment	not modelled	99.6	11	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
62	c3gz6A	Alignment	not modelled	99.5	15	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
63	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
64	c3f6aA	Alignment	not modelled	99.5	26	PDB header: hydrolase Chain: A: PDB Molecule: hydrolase, nudix family; PDBTitle: crystal structure of a hydrolase, nudix family from2 clostridium perfringens
65	d2fmla2	Alignment	not modelled	99.5	22	Fold: Nudix Superfamily: Nudix Family: BT0354 N-terminal domain-like
66	c2fb1A	Alignment	not modelled	99.5	15	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: conserved hypothetical protein; PDBTitle: crystal structure of protein bt0354 from bacteroides thetaiotaomicron
67	c2i6kA	Alignment	not modelled	99.5	18	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
68	c3edsA	Alignment	not modelled	99.5	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	d1k2ea	Alignment	not modelled	99.5	15	Fold: Nudix Superfamily: Nudix Family: MutT-like
70	c3f13A	Alignment	not modelled	99.4	20	PDB header: hydrolase Chain: A: PDB Molecule: putative nudix hydrolase family member; PDBTitle: crystal structure of putative nudix hydrolase family member2 from chromobacterium violaceum
71	c3rh7A	Alignment	not modelled	99.4	12	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	c2fmlB	Alignment	not modelled	99.4	24	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
73	c2pnyA	Alignment	not modelled	99.3	16	PDB header: isomerase Chain: A: PDB Molecule: isopentenyl-diphosphate delta-isomerase 2; PDBTitle: structure of human isopentenyl-diphosphate delta-isomerase 2
74	d1q33a	Alignment	not modelled	99.3	20	Fold: Nudix Superfamily: Nudix Family: MutT-like
75	d1u20a1	Alignment	not modelled	99.3	17	Fold: Nudix Superfamily: Nudix Family: MutT-like
76	d1x51a1	Alignment	not modelled	99.2	8	Fold: Nudix Superfamily: Nudix Family: MutY C-terminal domain-like
77	c3qsjA	Alignment	not modelled	99.2	18	PDB header: hydrolase Chain: A: PDB Molecule: nudix hydrolase; PDBTitle: crystal structure of nudix hydrolase from alicyclobacillus2 acidocaldarius
78	c1rrqA	Alignment	not modelled	99.1	15	PDB header: hydrolase/dna Chain: A: PDB Molecule: muty; PDBTitle: muty adenine glycosylase in complex with dna containing an2 a:oxog pair
79	c2i8eB	Alignment	not modelled	99.0	9	PDB header: nuclear protein Chain: B: PDB Molecule: cleavage and polyadenylation specificity factor 5;

79	c2jbqB_	Alignment	not modelled	99.0	9	PDBTitle: crystal structure of human cleavage and polyadenylation2 specificity factor 5 (cpsf5) in complex with a sulphate3 ion.
80	d1rrqa2	Alignment	not modelled	99.0	16	Fold: Nudix Superfamily: Nudix Family: MutY C-terminal domain-like
81	c3couA_	Alignment	not modelled	98.4	16	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	98.0	20	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	83.2	14	PDB header: rna binding protein Chain: E: PDB Molecule: cleavage and polyadenylation specificity factor subunit 5; PDBTitle: cfim25-cfim68 complex
84	d2dexx3	Alignment	not modelled	12.8	20	Fold: Pentelin, beta/alpha-propeller Superfamily: Pentelin Family: Peptidylarginine deiminase Pad4, catalytic C-terminal domain
85	c1w63T_	Alignment	not modelled	12.7	14	PDB header: endocytosis Chain: T: PDB Molecule: adapter-related protein complex 1 sigma 1a PDBTitle: ap1 clathrin adaptor core
86	c2hf6A_	Alignment	not modelled	11.6	10	PDB header: protein transport Chain: A: PDB Molecule: coatomer subunit zeta-1; PDBTitle: solution structure of human zeta-cop
87	c3h76A_	Alignment	not modelled	11.5	33	PDB header: transferase Chain: A: PDB Molecule: pqs biosynthetic enzyme; PDBTitle: crystal structure of pqsD, a key enzyme in pseudomonas2 aeruginosa quinolone signal biosynthesis pathway
88	d1gw5m2	Alignment	not modelled	10.6	19	Fold: Profilin-like Superfamily: SNARE-like Family: Clathrin coat assembly domain
89	d1gw5s_	Alignment	not modelled	10.3	11	Fold: Profilin-like Superfamily: SNARE-like Family: Clathrin coat assembly domain
90	c2jswA_	Alignment	not modelled	8.2	17	PDB header: actin-binding protein Chain: A: PDB Molecule: talin-1; PDBTitle: nmr structure of the talin c-terminal actin binding site
91	d1aopa2	Alignment	not modelled	7.9	13	Fold: Ferredoxin-like Superfamily: Nitrite/Sulfite reductase N-terminal domain-like Family: Duplicated SIR/NiR-like domains 1 and 3
92	d2fug21	Alignment	not modelled	7.4	15	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: NQO2-like
93	c3s3lB_	Alignment	not modelled	7.2	17	PDB header: transferase Chain: B: PDB Molecule: cerj; PDBTitle: crystal structure of cerj from streptomyces tendae
94	c3lx6B_	Alignment	not modelled	6.6	21	PDB header: transferase Chain: B: PDB Molecule: cytosine-specific methyltransferase; PDBTitle: structure of probable cytosine-specific methyltransferase from2 shigella flexneri
95	d1ub7a1	Alignment	not modelled	6.4	12	Fold: Thiolase-like Superfamily: Thiolase-like Family: Chalcone synthase-like
96	d1bm8a_	Alignment	not modelled	6.1	20	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	c3lmaC_	Alignment	not modelled	5.9	29	PDB header: membrane protein Chain: C: PDB Molecule: stage v sporulation protein ad (spovad); PDBTitle: crystal structure of the stage v sporulation protein ad2 (spovad) from bacillus licheniformis. northeast structural3 genomics consortium target bir6.
98	c1w63P_	Alignment	not modelled	5.7	17	PDB header: endocytosis Chain: P: PDB Molecule: adaptor-related protein complex 1, mu 1 subunit; PDBTitle: ap1 clathrin adaptor core
99	d1p9qc3	Alignment	not modelled	5.2	25	Fold: Ferredoxin-like Superfamily: EF-G C-terminal domain-like Family: Hypothetical protein AF0491, C-terminal domain