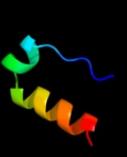


# Phyre<sup>2</sup>

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Description	P45736
Date	Thu Jan 5 12:03:28 GMT 2012
Unique Job ID	1fcf921c99401d5c

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c3hr1A_	Alignment		100.0	49	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> endonuclease-like protein; <b>PDBTitle:</b> crystal structure of a putative endonuclease-like protein (ngo0050)2 from neisseria gonorrhoeae
2	d1cw0a_	Alignment		99.9	25	<b>Fold:</b> Restriction endonuclease-like <b>Superfamily:</b> Restriction endonuclease-like <b>Family:</b> Very short patch repair (VSR) endonuclease
3	d1vsra_	Alignment		99.7	25	<b>Fold:</b> Restriction endonuclease-like <b>Superfamily:</b> Restriction endonuclease-like <b>Family:</b> Very short patch repair (VSR) endonuclease
4	d1m0da_	Alignment		87.7	22	<b>Fold:</b> Restriction endonuclease-like <b>Superfamily:</b> Restriction endonuclease-like <b>Family:</b> Endonuclease I (Holliday junction resolvase)
5	c2fqzC_	Alignment		26.9	11	<b>PDB header:</b> hydrolase/dna <b>Chain:</b> C: <b>PDB Molecule:</b> r.ecl18ki; <b>PDBTitle:</b> metal-depleted ecl18ki in complex with uncleaved dna
6	d1texa_	Alignment		25.3	14	<b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases <b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases <b>Family:</b> PAPS sulfotransferase
7	c2ovfA_	Alignment		24.7	19	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> stal; <b>PDBTitle:</b> crystal structure of stal-pap complex
8	c2kyrA_	Alignment		22.0	10	<b>PDB header:</b> transferase <b>Chain:</b> A: <b>PDB Molecule:</b> fructose-like phosphotransferase enzyme iiib component 1; <b>PDBTitle:</b> solution structure of enzyme iiib subunit of pts system from escherichia coli k12. northeast structural genomics consortium target3 er315/ontario center for structural proteomics target ec0544
9	c3mg9A_	Alignment		20.0	14	<b>PDB header:</b> transferase/antibiotic <b>Chain:</b> A: <b>PDB Molecule:</b> teg12; <b>PDBTitle:</b> teg 12 binary structure complexed with the teicoplanin aglycone
10	c3mgbA_	Alignment		16.2	15	<b>PDB header:</b> transferase/antibiotic <b>Chain:</b> A: <b>PDB Molecule:</b> teg12; <b>PDBTitle:</b> teg 12 ternary structure complexed with pap and the teicoplanin2 aglycone
11	c3rn1A_	Alignment		15.5	16	<b>PDB header:</b> transferase <b>Chain:</b> A: <b>PDB Molecule:</b> sulfotransferase; <b>PDBTitle:</b> crystal structure of sulfotransferase from alicyclobacillus2 acidocaldarius

12	<a href="#">d1xv1a</a>	Alignment		12.4	16	<b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases <b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases <b>Family:</b> PAPS sulfotransferase
13	<a href="#">d1qua</a>	Alignment		12.0	12	<b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases <b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases <b>Family:</b> PAPS sulfotransferase
14	<a href="#">d1insta</a>	Alignment		12.0	12	<b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases <b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases <b>Family:</b> PAPS sulfotransferase
15	<a href="#">c1nstA</a>	Alignment		12.0	12	<b>PDB header:</b> sulfotransferase <b>Chain:</b> A: <b>PDB Molecule:</b> heparan sulfate n-deacetylase/n-sulfotransferase; <b>PDBTitle:</b> the sulfotransferase domain of human heparin sulfate n-2 deacetylase/n-sulfotransferase
16	<a href="#">c1zd1B</a>	Alignment		11.9	20	<b>PDB header:</b> transferase <b>Chain:</b> B: <b>PDB Molecule:</b> sulfotransferase 4a1; <b>PDBTitle:</b> human sulfotransferase sult4a1
17	<a href="#">d3bfxa1</a>	Alignment		11.2	12	<b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases <b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases <b>Family:</b> PAPS sulfotransferase
18	<a href="#">c1xe1A</a>	Alignment		11.2	26	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> hypothetical protein pf0907; <b>PDBTitle:</b> hypothetical protein from pyrococcus furiosus pfu-880080-001
19	<a href="#">d1xe1a</a>	Alignment		11.2	26	<b>Fold:</b> Reductase/isomerase/elongation factor common domain <b>Superfamily:</b> Translation proteins <b>Family:</b> Elongation factors
20	<a href="#">c2gwhA</a>	Alignment		10.1	8	<b>PDB header:</b> transferase <b>Chain:</b> A: <b>PDB Molecule:</b> sulfotransferase 1c2; <b>PDBTitle:</b> human sulfotranferase sult1c2 in complex with pap and2 pentachlorophenol
21	<a href="#">d1j99a</a>	Alignment	not modelled	10.0	24	<b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases <b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases <b>Family:</b> PAPS sulfotransferase
22	<a href="#">d1vkja</a>	Alignment	not modelled	9.7	4	<b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases <b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases <b>Family:</b> PAPS sulfotransferase
23	<a href="#">c1vkjA</a>	Alignment	not modelled	9.7	4	<b>PDB header:</b> transferase <b>Chain:</b> A: <b>PDB Molecule:</b> heparan sulfate (glucosamine) 3-o-sulfotransferase2 isoform 1 in the presence of pap <b>PDBTitle:</b> crystal structure of heparan sulfate 3-o-sulfotransferase2 isoform 1 in the presence of pap
24	<a href="#">c2h8kA</a>	Alignment	not modelled	9.6	24	<b>PDB header:</b> transferase <b>Chain:</b> A: <b>PDB Molecule:</b> sult1c3 splice variant d; <b>PDBTitle:</b> human sulfotranferase sult1c3 in complex with pap
25	<a href="#">c3fovA</a>	Alignment	not modelled	9.6	15	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> upf0102 protein rpa0323; <b>PDBTitle:</b> crystal structure of protein rpa0323 of unknown function from2 rhodopseudomonas palustris
26	<a href="#">c3u3oA</a>	Alignment	not modelled	9.6	20	<b>PDB header:</b> transferase <b>Chain:</b> A: <b>PDB Molecule:</b> sulfotransferase 1a1; <b>PDBTitle:</b> crystal structure of human sult1a1 bound to pap and two 3-cyano-7-2 hydroxycoumarin
27	<a href="#">d1ls6a</a>	Alignment	not modelled	9.6	20	<b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases <b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases <b>Family:</b> PAPS sulfotransferase
28	<a href="#">c3ap3A</a>	Alignment	not modelled	9.5	20	<b>PDB header:</b> transferase <b>Chain:</b> A: <b>PDB Molecule:</b> protein-tyrosine sulfotransferase 2; <b>PDBTitle:</b> crystal structure of human tyrosylprotein sulfotransferase-2 complexed2 with pap <b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases

29	<a href="#">d2a3ra1</a>	Alignment	not modelled	9.4	20	<b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases <b>Family:</b> PAPS sulfotransferase
30	<a href="#">d1g3ma_</a>	Alignment	not modelled	9.4	12	<b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases <b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases <b>Family:</b> PAPS sulfotransferase
31	<a href="#">d1fmja_</a>	Alignment	not modelled	9.3	12	<b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases <b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases <b>Family:</b> PAPS sulfotransferase
32	<a href="#">c2zvpX_</a>	Alignment	not modelled	9.0	20	<b>PDB header:</b> transferase <b>Chain:</b> X: <b>PDB Molecule:</b> tyrosine-ester sulfotransferase; <b>PDBTitle:</b> crystal structure of mouse cytosolic sulfotransferase msult1d1 complex2 with pap and p-nitrophenol
33	<a href="#">d1jg5a_</a>	Alignment	not modelled	8.7	36	<b>Fold:</b> GTP cyclohydrolase I feedback regulatory protein, GFRP <b>Superfamily:</b> GTP cyclohydrolase I feedback regulatory protein, GFRP <b>Family:</b> GTP cyclohydrolase I feedback regulatory protein, GFRP
34	<a href="#">c2zq5A_</a>	Alignment	not modelled	7.9	4	<b>PDB header:</b> transferase <b>Chain:</b> A: <b>PDB Molecule:</b> putative uncharacterized protein; <b>PDBTitle:</b> crystal structure of sulfotransferase stf1 from2 mycobacterium tuberculosis h37rv (type1 form)
35	<a href="#">d1x9ga_</a>	Alignment	not modelled	7.9	18	<b>Fold:</b> Isochorismatase-like hydrolases <b>Superfamily:</b> Isochorismatase-like hydrolases <b>Family:</b> Isochorismatase-like hydrolases
36	<a href="#">c2z6vA_</a>	Alignment	not modelled	7.8	12	<b>PDB header:</b> unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> putative uncharacterized protein; <b>PDBTitle:</b> crystal structure of sulfotransferase stf9 from2 mycobacterium avium
37	<a href="#">c2vldA_</a>	Alignment	not modelled	7.2	19	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> upf0286 protein pyrab01260; <b>PDBTitle:</b> crystal structure of a repair endonuclease from pyrococcus abyssi
38	<a href="#">c3bm3A_</a>	Alignment	not modelled	7.2	13	<b>PDB header:</b> hydrolase/dna <b>Chain:</b> A: <b>PDB Molecule:</b> pspgi restriction endonuclease; <b>PDBTitle:</b> restriction endonuclease pspgi-substrate dna complex
39	<a href="#">d1q44a_</a>	Alignment	not modelled	6.9	24	<b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases <b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases <b>Family:</b> PAPS sulfotransferase
40	<a href="#">c2qjwA_</a>	Alignment	not modelled	6.5	16	<b>PDB header:</b> hydrolase <b>Chain:</b> A: <b>PDB Molecule:</b> uncharacterized protein xcc1541; <b>PDBTitle:</b> crystal structure of a putative hydrolase of the alpha/beta2 superfamily (xcc1541) from xanthomonas campestris pv. campestris at 3.135 a resolution
41	<a href="#">c1q1qa_</a>	Alignment	not modelled	6.5	20	<b>PDB header:</b> transferase <b>Chain:</b> A: <b>PDB Molecule:</b> sulfotransferase family, cytosolic, 2b, member 1 <b>PDBTitle:</b> crystal structure of human pregnenolone sulfotransferase2 (sult2b1a) in the presence of pap
42	<a href="#">c2i9iA_</a>	Alignment	not modelled	6.2	40	<b>PDB header:</b> structural genomics, unknown function <b>Chain:</b> A: <b>PDB Molecule:</b> hypothetical protein; <b>PDBTitle:</b> crystal structure of helicobacter pylori protein hp0492
43	<a href="#">d2i9ia1</a>	Alignment	not modelled	6.2	40	<b>Fold:</b> Anticodon-binding domain-like <b>Superfamily:</b> XCC0632-like <b>Family:</b> NLBH-like
44	<a href="#">d1t8ta_</a>	Alignment	not modelled	6.1	12	<b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases <b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases <b>Family:</b> PAPS sulfotransferase
45	<a href="#">d1q20a_</a>	Alignment	not modelled	5.5	20	<b>Fold:</b> P-loop containing nucleoside triphosphate hydrolases <b>Superfamily:</b> P-loop containing nucleoside triphosphate hydrolases <b>Family:</b> PAPS sulfotransferase
46	<a href="#">c3fcgB_</a>	Alignment	not modelled	5.3	24	<b>PDB header:</b> membrane protein, protein transport <b>Chain:</b> B: <b>PDB Molecule:</b> f1 capsule-anchoring protein; <b>PDBTitle:</b> crystal structure analysis of the middle domain of the2 caf1a usher
47	<a href="#">c3bd9A_</a>	Alignment	not modelled	5.3	12	<b>PDB header:</b> transferase <b>Chain:</b> A: <b>PDB Molecule:</b> heparan sulfate glucosamine 3-o-sulfotransferase <b>PDBTitle:</b> human 3-o-sulfotransferase isoform 5 with bound pap
48	<a href="#">c3gzbC_</a>	Alignment	not modelled	5.1	32	<b>PDB header:</b> lyase <b>Chain:</b> C: <b>PDB Molecule:</b> putative snoal-like polyketide cyclase; <b>PDBTitle:</b> crystal structure of putative snoal-like polyketide cyclase2 (yp_001182657.1) from shewanella putrefaciens cn-32 at 1.44 a3 resolution
49	<a href="#">c1f3mB_</a>	Alignment	not modelled	5.1	22	<b>PDB header:</b> transferase <b>Chain:</b> B: <b>PDB Molecule:</b> serine/threonine-protein kinase pak-alpha; <b>PDBTitle:</b> crystal structure of human serine/threonine kinase pak1
50	<a href="#">d1whza_</a>	Alignment	not modelled	5.1	13	<b>Fold:</b> dsRBD-like <b>Superfamily:</b> YcfA/nrd intein domain <b>Family:</b> YcfA-like