






















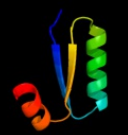



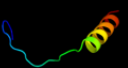

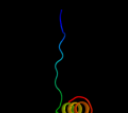


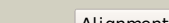


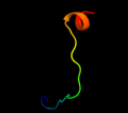






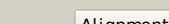
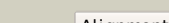




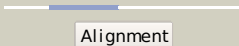


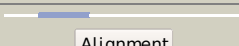


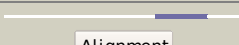
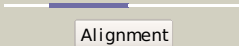
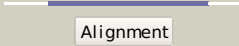
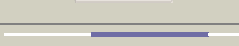
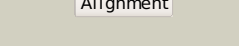



#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d1nrza_	 Alignment		100.0	35	Fold: PTS IIb component Superfamily: PTS IIb component Family: PTS IIb component
2	c1vsqC_	 Alignment		100.0	37	PDB header: transferase Chain: C: PDB Molecule: mannose-specific phosphotransferase enzyme iib PDBTitle: solution nmr structure of the productive complex between2 iiamannose and iibmannose of the mannose transporter of3 the e. coli phosphotransferase system
3	c3lfjB_	 Alignment		100.0	25	PDB header: transferase Chain: B: PDB Molecule: phosphotransferase system, mannose/fructose/n- PDBTitle: crystal structure of manxb from thermoanaerobacter tengcongensis
4	d1blea_	 Alignment		100.0	33	Fold: PTS IIb component Superfamily: PTS IIb component Family: PTS IIb component
5	c3p3vB_	 Alignment		100.0	42	PDB header: transferase Chain: B: PDB Molecule: pts system, n-acetylgalactosamine-specific iib component; PDBTitle: crystal structure of a pts dependent n-acetyl-galactosamine-iib2 component (agav, spy_0631) from streptococcus pyogenes at 1.65 a3 resolution
6	c3eyeA_	 Alignment		100.0	46	PDB header: transferase Chain: A: PDB Molecule: pts system n-acetylgalactosamine-specific iib PDBTitle: crystal structure of pts system n-acetylgalactosamine-2 specific iib component 1 from escherichia coli
7	c1qapA_	 Alignment		65.0	8	PDB header: glycosyltransferase Chain: A: PDB Molecule: quinolinic acid phosphoribosyltransferase; PDBTitle: quinolinic acid phosphoribosyltransferase with bound2 quinolinic acid
8	c3l0gD_	 Alignment		62.3	16	PDB header: transferase Chain: D: PDB Molecule: nicotinate-nucleotide pyrophosphorylase; PDBTitle: crystal structure of nicotinate-nucleotide pyrophosphorylase from2 ehrlichia chaffeensis at 2.05a resolution
9	d1r8ja2	 Alignment		54.3	17	Fold: Flavodoxin-like Superfamily: CheY-like Family: N-terminal domain of the circadian clock protein KaiA
10	c3rfaA_	 Alignment		52.2	14	PDB header: oxidoreductase Chain: A: PDB Molecule: ribosomal rna large subunit methyltransferase n; PDBTitle: x-ray structure of rlmn from escherichia coli in complex with s-2 adenosylmethionine
11	d1k68a_	 Alignment		48.1	9	Fold: Flavodoxin-like Superfamily: CheY-like Family: CheY-related

12	c3ilhA_	 Alignment		44.9	11	PDB header: transcription regulator Chain: A: PDB Molecule: two component response regulator; PDBTitle: crystal structure of two component response regulator from cytophaga2 hutchinsonii
13	d1qapa1	 Alignment		44.5	8	Fold: TIM beta/alpha-barrel Superfamily: Nicotinate/Quinolinate PRTase C-terminal domain-like Family: NadC C-terminal domain-like
14	c3pm7A_	 Alignment		42.5	13	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of ef_3132 protein from enterococcus faecalis at the2 resolution 2a, northeast structural genomics consortium target efr184
15	c2k1oA_	 Alignment		37.7	19	PDB header: gene regulation Chain: A: PDB Molecule: putative; PDBTitle: nmr structure of helicobacter pylori jhp0511 (hp0564).
16	c2yxxA_	 Alignment		35.7	16	PDB header: lyase Chain: A: PDB Molecule: diaminopimelate decarboxylase; PDBTitle: crystal structure analysis of diaminopimelate decarboxylate (lysa)
17	c3btnA_	 Alignment		35.1	11	PDB header: biosynthetic protein Chain: A: PDB Molecule: antizyme inhibitor 1; PDBTitle: crystal structure of antizyme inhibitor, an ornithine2 decarboxylase homologous protein
18	c3obhA_	 Alignment		33.1	9	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: x-ray crystal structure of protein sp_0782 (7-79) from streptococcus2 pneumoniae. northeast structural genomics consortium target spr104
19	c3paiA_	 Alignment		33.0	11	PDB header: transferase Chain: A: PDB Molecule: nicotinate-nucleotide pyrophosphorylase, carboxylating; PDBTitle: 2.00 angstrom resolution crystal structure of a quinolate2 phosphoribosyltransferase from vibrio cholerae o1 biovar eltor str.3 n16961
20	d1qpoa1	 Alignment		30.9	9	Fold: TIM beta/alpha-barrel Superfamily: Nicotinate/Quinolinate PRTase C-terminal domain-like Family: NadC C-terminal domain-like
21	c2y5sA_	 Alignment	not modelled	30.5	12	PDB header: transferase Chain: A: PDB Molecule: dihydropteroate synthase; PDBTitle: crystal structure of burkholderia cenocepacia dihydropteroate2 synthase complexed with 7,8-dihydropteroate.
22	d1t0kb_	 Alignment	not modelled	30.2	10	Fold: Bacillus chorismate mutase-like Superfamily: L30e-like Family: L30e/L7ae ribosomal proteins
23	c3gl9B_	 Alignment	not modelled	30.2	15	PDB header: signaling protein Chain: B: PDB Molecule: response regulator; PDBTitle: the structure of a histidine kinase-response regulator2 complex sheds light into two-component signaling and3 reveals a novel cis autophosphorylation mechanism
24	c3eqzB_	 Alignment	not modelled	29.7	12	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: response regulator; PDBTitle: crystal structure of a response regulator from colwellia2 psychrerythraea
25	d1k66a_	 Alignment	not modelled	29.2	17	Fold: Flavodoxin-like Superfamily: CheY-like Family: CheY-related
26	d1ajza_	 Alignment	not modelled	27.4	14	Fold: TIM beta/alpha-barrel Superfamily: Dihydropteroate synthetase-like Family: Dihydropteroate synthetase
27	d2obba1	 Alignment	not modelled	27.2	7	Fold: HAD-like Superfamily: HAD-like Family: BT0820-like
28	c3khtA_	 Alignment	not modelled	26.5	12	PDB header: signaling protein Chain: A: PDB Molecule: response regulator; PDBTitle: crystal structure of response regulator from hahella chejuensis

29	c3eywA		Alignment	not modelled	25.8	18	PDB header: transport protein Chain: A: PDB Molecule: c-terminal domain of glutathione-regulated potassium-efflux PDBTitle: crystal structure of the c-terminal domain of e. coli kefc in complex2 with keff
30	c2qv0A		Alignment	not modelled	25.1	15	PDB header: transcription Chain: A: PDB Molecule: protein mrke; PDBTitle: crystal structure of the response regulatory domain of2 protein mrke from klebsiella pneumoniae
31	c3cz5B		Alignment	not modelled	24.7	8	PDB header: transcription regulator Chain: B: PDB Molecule: two-component response regulator, luxr family; PDBTitle: crystal structure of two-component response regulator, luxr family,2 from aurantimonas sp. si85-9a1
32	c3n53B		Alignment	not modelled	24.6	10	PDB header: transcription Chain: B: PDB Molecule: response regulator receiver modulated diguanylate cyclase; PDBTitle: crystal structure of a response regulator receiver modulated2 diguanylate cyclase from pelobacter carbinolicus
33	d1d7ka2		Alignment	not modelled	23.4	8	Fold: TIM beta/alpha-barrel Superfamily: PLP-binding barrel Family: Alanine racemase-like, N-terminal domain
34	c1qpoA		Alignment	not modelled	22.2	9	PDB header: transferase Chain: A: PDB Molecule: quinolinate acid phosphoribosyl transferase; PDBTitle: quinolinate phosphoribosyl transferase (qaprtase) apo-enzyme from2 mycobacterium tuberculosis
35	d2i7pa1		Alignment	not modelled	21.6	14	Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: Fumble-like
36	c3cnbC		Alignment	not modelled	20.2	11	PDB header: dna binding protein Chain: C: PDB Molecule: dna-binding response regulator, merr family; PDBTitle: crystal structure of signal receiver domain of dna binding response2 regulator protein (merr) from colwellia psychrerythraea 34h
37	c3m6mF		Alignment	not modelled	19.8	25	PDB header: lyase/transferase Chain: F: PDB Molecule: sensory/regulatory protein rpfc; PDBTitle: crystal structure of rpff complexed with rec domain of rpfc
38	c3q41B		Alignment	not modelled	19.4	11	PDB header: transport protein Chain: B: PDB Molecule: glutamate [nmda] receptor subunit zeta-1; PDBTitle: crystal structure of the glun1 n-terminal domain (ntd)
39	d1kgsa1		Alignment	not modelled	18.4	8	Fold: DNA/RNA-binding 3-helical bundle Superfamily: C-terminal effector domain of the bipartite response regulators Family: PhoB-like
40	d1a04a2		Alignment	not modelled	17.3	12	Fold: Flavodoxin-like Superfamily: CheY-like Family: CheY-related
41	c3hebB		Alignment	not modelled	16.9	13	PDB header: transcription regulator Chain: B: PDB Molecule: response regulator receiver domain protein (chey); PDBTitle: crystal structure of response regulator receiver domain from2 rhodospirillum rubrum
42	c2on3A		Alignment	not modelled	16.8	8	PDB header: lyase Chain: A: PDB Molecule: ornithine decarboxylase; PDBTitle: a structural insight into the inhibition of human and2 leishmania donovani ornithine decarboxylases by 3-aminooxy-3 1-aminopropane
43	d2i7na2		Alignment	not modelled	16.7	11	Fold: Ribonuclease H-like motif Superfamily: Actin-like ATPase domain Family: Fumble-like
44	d1hkva2		Alignment	not modelled	16.5	19	Fold: TIM beta/alpha-barrel Superfamily: PLP-binding barrel Family: Alanine racemase-like, N-terminal domain
45	c2qvgA		Alignment	not modelled	16.4	8	PDB header: transferase Chain: A: PDB Molecule: two component response regulator; PDBTitle: the crystal structure of a two-component response regulator2 from legionella pneumophila
46	d1ad1a		Alignment	not modelled	16.1	18	Fold: TIM beta/alpha-barrel Superfamily: Dihydropteroate synthetase-like Family: Dihydropteroate synthetase
47	d1dd9a		Alignment	not modelled	15.5	17	Fold: DNA primase core Superfamily: DNA primase core Family: DNA primase DnaG catalytic core
48	c1dd9A		Alignment	not modelled	15.5	17	PDB header: transferase Chain: A: PDB Molecule: dna primase; PDBTitle: structure of the dnag catalytic core
49	c3cg0A		Alignment	not modelled	15.4	13	PDB header: lyase Chain: A: PDB Molecule: response regulator receiver modulated diguanylate cyclase PDBTitle: crystal structure of signal receiver domain of modulated diguanylate2 cyclase from desulfovibrio desulfuricans g20, an example of alternate3 folding
50	c2bmbA		Alignment	not modelled	15.1	20	PDB header: transferase Chain: A: PDB Molecule: folic acid synthesis protein fol1; PDBTitle: x-ray structure of the bifunctional 6-hydroxymethyl-7,8-2 dihydroxypterin pyrophosphokinase dihydropteroate synthase3 from saccharomyces cerevisiae
51	c1x1oC		Alignment	not modelled	14.9	11	PDB header: transferase Chain: C: PDB Molecule: nicotinate-nucleotide pyrophosphorylase; PDBTitle: crystal structure of project id tt0268 from thermus thermophilus hb8
							PDB header: transcription

52	c2qsjB_	Alignment	not modelled	14.8	12	Chain: B: PDB Molecule: dna-binding response regulator, luxr family; PDBTitle: crystal structure of a luxr family dna-binding response2 regulator from silicibacter pomeroyi
53	d1i3ca_	Alignment	not modelled	14.4	9	Fold: Flavodoxin-like Superfamily: CheY-like Family: CheY-related
54	c2is8A_	Alignment	not modelled	13.5	13	PDB header: structural protein Chain: A: PDB Molecule: molybdopterin biosynthesis enzyme, moab; PDBTitle: crystal structure of the molybdopterin biosynthesis enzyme moab2 (ttha0341) from thermus thermophilus hb8
55	c2oqrA_	Alignment	not modelled	13.0	19	PDB header: transcription,signaling protein Chain: A: PDB Molecule: sensory transduction protein regx3; PDBTitle: the structure of the response regulator regx3 from mycobacterium2 tuberculosis
56	c3eulB_	Alignment	not modelled	13.0	9	PDB header: transcription Chain: B: PDB Molecule: possible nitrate/nitrite response transcriptional PDBTitle: structure of the signal receiver domain of the putative2 response regulator narl from mycobacterium tuberculosis
57	d1k3ra2	Alignment	not modelled	13.0	9	Fold: alpha/beta knot Superfamily: alpha/beta knot Family: Hypothetical protein MTH1 (MT0001), dimerisation domain
58	c3q9vB_	Alignment	not modelled	12.8	8	PDB header: dna binding protein Chain: B: PDB Molecule: dna-binding response regulator; PDBTitle: crystal structure of rra c-terminal domain(123-221) from deinococcus2 radiodurans
59	d1oqya2	Alignment	not modelled	12.7	24	Fold: RuvA C-terminal domain-like Superfamily: UBA-like Family: UBA domain
60	d2r25b1	Alignment	not modelled	12.6	19	Fold: Flavodoxin-like Superfamily: CheY-like Family: CheY-related
61	c2zkr6_	Alignment	not modelled	12.5	10	PDB header: ribosomal protein/rna Chain: 6: PDB Molecule: 60s ribosomal protein l30e; PDBTitle: structure of a mammalian ribosomal 60s subunit within an2 80s complex obtained by docking homology models of the rna3 and proteins into an 8.7 a cryo-em map
62	d1o4ua1	Alignment	not modelled	12.5	16	Fold: TIM beta/alpha-barrel Superfamily: Nicotinate/Quinolinate PRTase C-terminal domain-like Family: NadC C-terminal domain-like
63	c2dzaA_	Alignment	not modelled	12.4	15	PDB header: transferase Chain: A: PDB Molecule: dihydropteroate synthase; PDBTitle: crystal structure of dihydropteroate synthase from thermus2 thermophilus hb8 in complex with 4-aminobenzoate
64	c3c3wB_	Alignment	not modelled	12.3	8	PDB header: transcription Chain: B: PDB Molecule: two component transcriptional regulatory protein devr; PDBTitle: crystal structure of the mycobacterium tuberculosis hypoxic response2 regulator dosr
65	c2o0tB_	Alignment	not modelled	12.3	18	PDB header: lyase Chain: B: PDB Molecule: diaminopimelate decarboxylase; PDBTitle: the three dimensional structure of diaminopimelate decarboxylase from2 mycobacterium tuberculosis reveals a tetrameric enzyme organisation
66	c3kyiB_	Alignment	not modelled	12.1	13	PDB header: transferase Chain: B: PDB Molecule: chey6 protein; PDBTitle: crystal structure of the phosphorylated p1 domain of chea3 in complex2 with chey6 from r. sphaeroides
67	d1w41a1	Alignment	not modelled	12.0	22	Fold: Bacillus chorismate mutase-like Superfamily: L30e-like Family: L30e/L7ae ribosomal proteins
68	d1t6t1_	Alignment	not modelled	11.9	17	Fold: Toprim domain Superfamily: Toprim domain Family: Toprim domain
69	c2qxyB_	Alignment	not modelled	11.9	18	PDB header: transcription Chain: B: PDB Molecule: response regulator; PDBTitle: crystal structure of a response regulator from thermotoga2 maritima
70	d1mb3a_	Alignment	not modelled	11.9	12	Fold: Flavodoxin-like Superfamily: CheY-like Family: CheY-related
71	d2f1fa1	Alignment	not modelled	11.6	8	Fold: Ferredoxin-like Superfamily: ACT-like Family: IlvH-like
72	c3h5iA_	Alignment	not modelled	11.4	11	PDB header: transcription Chain: A: PDB Molecule: response regulator/sensory box protein/ggdef PDBTitle: crystal structure of the n-terminal domain of a response2 regulator/sensory box/ggdef 3-domain protein from3 carboxydothermus hydrogenoformans
73	c2a5hC_	Alignment	not modelled	11.2	25	PDB header: isomerase Chain: C: PDB Molecule: l-lysine 2,3-aminomutase; PDBTitle: 2.1 angstrom x-ray crystal structure of lysine-2,3-aminomutase from2 clostridium subterminale sb4, with michaelis analog (l-alpha-lysine3 external aldimine form of pyridoxal-5'-phosphate).
74	d2fgca2	Alignment	not modelled	11.1	21	Fold: Ferredoxin-like Superfamily: ACT-like Family: IlvH-like
75	c3h6hB_	Alignment	not modelled	11.1	10	PDB header: membrane protein Chain: B: PDB Molecule: glutamate receptor, ionotropic kainate 2; PDBTitle: crystal structure of the glur6 amino terminal domain dimer assembly2 mpd form

76	d2bo1a1	Alignment	not modelled	10.9	16	Fold: Bacillus chorismate mutase-like Superfamily: L30e-like Family: L30e/L7ae ribosomal proteins
77	c2k5jB	Alignment	not modelled	10.8	17	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: uncharacterized protein yiif; PDBTitle: solution structure of protein yiif from shigella flexneri2 serotype 5b (strain 8401) . northeast structural genomics3 consortium target sft1
78	c3cpqB	Alignment	not modelled	10.7	14	PDB header: ribosomal protein Chain: B: PDB Molecule: 50s ribosomal protein l30e; PDBTitle: crystal structure of l30e a ribosomal protein from2 methanocaldococcus jannaschii dsm2661 (mj1044)
79	c3luaA	Alignment	not modelled	10.4	14	PDB header: transcription regulator Chain: A: PDB Molecule: response regulator receiver protein; PDBTitle: crystal structure of a signal receiver domain of two component signal2 transduction (histidine kinase) from clostridium thermocellum
80	c2zayA	Alignment	not modelled	10.4	5	PDB header: signaling protein Chain: A: PDB Molecule: response regulator receiver protein; PDBTitle: crystal structure of response regulator from desulfuromonas2 acetoxidans
81	d1dz3a	Alignment	not modelled	10.4	14	Fold: Flavodoxin-like Superfamily: CheY-like Family: CheY-related
82	c2yr1B	Alignment	not modelled	10.2	13	PDB header: lyase Chain: B: PDB Molecule: 3-dehydroquinate dehydratase; PDBTitle: crystal structure of 3-dehydroquinate dehydratase from geobacillus2 kaustophilus hta426
83	c3n2bD	Alignment	not modelled	10.2	14	PDB header: lyase Chain: D: PDB Molecule: diaminopimelate decarboxylase; PDBTitle: 1.8 angstrom resolution crystal structure of diaminopimelate2 decarboxylase (lysa) from vibrio cholerae.
84	c3cg4A	Alignment	not modelled	10.2	14	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: response regulator receiver domain protein (cheY-like); PDBTitle: crystal structure of response regulator receiver domain protein (cheY-2 like) from methanospirillum hungatei jf-1
85	c1rn1A	Alignment	not modelled	10.2	12	PDB header: signal transduction protein Chain: A: PDB Molecule: nitrate/nitrite response regulator protein narl; PDBTitle: the nitrate/nitrite response regulator protein narl from narl
86	c1k3rA	Alignment	not modelled	10.1	9	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: conserved protein mt0001; PDBTitle: crystal structure of the methyltransferase with a knot from2 methanobacterium thermoautotrophicum
87	d1o57a2	Alignment	not modelled	10.1	13	Fold: PRTase-like Superfamily: PRTase-like Family: Phosphoribosyltransferases (PRTases)
88	c1a2oB	Alignment	not modelled	10.0	12	PDB header: bacterial chemotaxis Chain: B: PDB Molecule: cheb methyltransferase; PDBTitle: structural basis for methyltransferase cheb regulation by a2 phosphorylation-activated domain
89	c3lufB	Alignment	not modelled	10.0	7	PDB header: signaling protein Chain: B: PDB Molecule: two-component system response regulator/ggdef PDBTitle: structure of probable two-component system response2 regulator/ggdef domain protein
90	c3smpA	Alignment	not modelled	9.8	11	PDB header: transferase Chain: A: PDB Molecule: pantothenate kinase 1; PDBTitle: monoclinic crystal structure of human pantothenate kinase 1 alpha
91	d1nyra3	Alignment	not modelled	9.8	11	Fold: RRF/tRNA synthetase additional domain-like Superfamily: ThrRS/AlaRS common domain Family: Threonyl-tRNA synthetase (ThrRS), second 'additional' domain
92	c3c3mA	Alignment	not modelled	9.7	14	PDB header: signaling protein Chain: A: PDB Molecule: response regulator receiver protein; PDBTitle: crystal structure of the n-terminal domain of response regulator2 receiver protein from methanoculleus marisnigri jr1
93	c3jteA	Alignment	not modelled	9.6	12	PDB header: protein binding Chain: A: PDB Molecule: response regulator receiver protein; PDBTitle: crystal structure of response regulator receiver domain2 protein from clostridium thermocellum
94	c2y7eA	Alignment	not modelled	9.5	16	PDB header: lyase Chain: A: PDB Molecule: 3-keto-5-aminoheptanoate cleavage enzyme; PDBTitle: crystal structure of the 3-keto-5-aminoheptanoate cleavage enzyme2 (kce) from candidatus cloacamonas acidaminovorans (tetragonal form)
95	c3t8yA	Alignment	not modelled	9.5	10	PDB header: hydrolase Chain: A: PDB Molecule: chemotaxis response regulator protein-glutamate PDBTitle: crystal structure of the response regulator domain of thermotoga2 maritima cheb
96	d1u0sy	Alignment	not modelled	9.4	13	Fold: Flavodoxin-like Superfamily: CheY-like Family: CheY-related
97	d1bs0a	Alignment	not modelled	9.3	15	Fold: PLP-dependent transferase-like Superfamily: PLP-dependent transferases Family: GABA-aminotransferase-like
98	c2i7pA	Alignment	not modelled	9.2	14	PDB header: transferase Chain: A: PDB Molecule: pantothenate kinase 3; PDBTitle: crystal structure of human pank3 in complex with accoa
99	d2pc6a2	Alignment	not modelled	9.1	6	Fold: Ferredoxin-like Superfamily: ACT-like Family: IlvH-like