



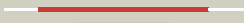


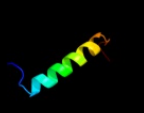

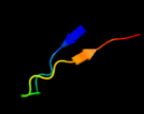








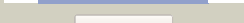



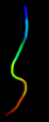


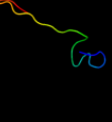



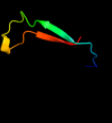



Phyre2

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Date	Thu Jan 5 12:05:46 GMT 2012
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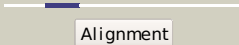
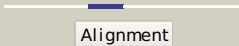
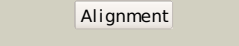

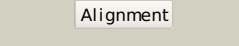
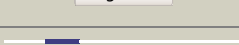
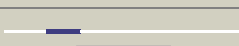
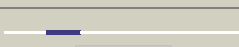
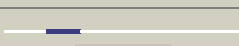
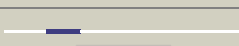



Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d2ea9a1	 Alignment		100.0	100	Fold: Profilin-like Superfamily: YeeU-like Family: YagB/YeeU/YfjZ-like
2	d2h28a1	 Alignment		100.0	64	Fold: Profilin-like Superfamily: YeeU-like Family: YagB/YeeU/YfjZ-like
3	d2inwa1	 Alignment		100.0	65	Fold: Profilin-like Superfamily: YeeU-like Family: YagB/YeeU/YfjZ-like
4	d1ryba_	 Alignment		58.8	23	Fold: Phosphorylase/hydrolase-like Superfamily: Peptidyl-tRNA hydrolase-like Family: Peptidyl-tRNA hydrolase-like
5	c3h3yF_	 Alignment		48.6	33	PDB header: viral protein Chain: F: PDB Molecule: baseplate structural protein gp6; PDBTitle: fitting of the gp6 crystal structure into 3d cryo-em2 reconstruction of bacteriophage t4 star-shaped baseplate
6	c2z2jA_	 Alignment		48.6	17	PDB header: hydrolase Chain: A: PDB Molecule: peptidyl-trna hydrolase; PDBTitle: crystal structure of peptidyl-trna hydrolase from mycobacterium2 tuberculosis
7	c3v2iA_	 Alignment		31.7	7	PDB header: hydrolase Chain: A: PDB Molecule: peptidyl-trna hydrolase; PDBTitle: structure of a peptidyl-trna hydrolase (pth) from burkholderia2 thailandensis
8	c3neaA_	 Alignment		31.5	14	PDB header: hydrolase Chain: A: PDB Molecule: peptidyl-trna hydrolase; PDBTitle: crystal structure of peptidyl-trna hydrolase from francisella2 tularensis
9	d2ptha_	 Alignment		30.0	24	Fold: Phosphorylase/hydrolase-like Superfamily: Peptidyl-tRNA hydrolase-like Family: Peptidyl-tRNA hydrolase-like
10	d2qda1	 Alignment		21.0	22	Fold: Nitrile hydratase alpha chain Superfamily: Nitrile hydratase alpha chain Family: Nitrile hydratase alpha chain
11	c2yqkA_	 Alignment		17.9	9	PDB header: transcription/apoptosis Chain: A: PDB Molecule: arginine-glutamic acid dipeptide repeats protein; PDBTitle: solution structure of the sant domain in arginine-glutamic2 acid dipeptide (re) repeats

12	d1lpba2	Alignment		15.5	71	Fold: Knottins (small inhibitors, toxins, lectins) Superfamily: Colipase-like Family: Colipase-like
13	d1du0a_	Alignment		15.5	29	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Homeodomain
14	c3aqoD_	Alignment		15.2	40	PDB header: membrane protein Chain: D: PDB Molecule: probable secdf protein-export membrane protein; PDBTitle: structure and function of a membrane component secdf that enhances2 protein export
15	d1xv2a_	Alignment		15.2	27	Fold: AF0104/ALDC/Ptd012-like Superfamily: AF0104/ALDC/Ptd012-like Family: Alpha-acetolactate decarboxylase-like
16	d2e7ga1	Alignment		12.9	14	Fold: Alpha-lytic protease prodomain-like Superfamily: Ribosome-binding factor A, RbfA Family: Ribosome-binding factor A, RbfA
17	d1s7ea1	Alignment		11.9	25	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Homeodomain
18	d1mh3a1	Alignment		11.8	22	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Homeodomain
19	d2d81a1	Alignment		11.8	28	Fold: alpha/beta-Hydrolases Superfamily: alpha/beta-Hydrolases Family: PHB depolymerase-like
20	d1le8a_	Alignment		10.9	25	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Homeodomain
21	d1p7jb_	Alignment	not modelled	10.8	29	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Homeodomain
22	c1a31A_	Alignment	not modelled	9.9	24	PDB header: isomerase/dna Chain: A: PDB Molecule: protein (topoisomerase i); PDBTitle: human reconstituted dna topoisomerase i in covalent complex2 with a 22 base pair dna duplex
23	d1e3oc1	Alignment	not modelled	9.7	13	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Homeodomain
24	c1n8sC_	Alignment	not modelled	9.5	43	PDB header: hydrolase Chain: C: PDB Molecule: colipase ii; PDBTitle: structure of the pancreatic lipase-colipase complex
25	d1au7a1	Alignment	not modelled	9.3	25	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Homeodomain
26	c3a03A_	Alignment	not modelled	8.5	31	PDB header: gene regulation Chain: A: PDB Molecule: t-cell leukemia homeobox protein 2; PDBTitle: crystal structure of hox11l1 homeodomain
27	c3hruA_	Alignment	not modelled	8.4	17	PDB header: transcription Chain: A: PDB Molecule: metalloregulator scar; PDBTitle: crystal structure of scar with bound zn2+
28	d1qcva_	Alignment	not modelled	8.3	50	Fold: Rubredoxin-like Superfamily: Rubredoxin-like Family: Rubredoxin
29	d6rxna_	Alignment	not modelled	8.3	67	Fold: Rubredoxin-like Superfamily: Rubredoxin-like

						Family: Rubredoxin
30	c2jobA	Alignment	not modelled	8.2	12	PDB header: lipid binding protein Chain: A: PDB Molecule: antilipopolysaccharide factor; PDBTitle: solution structure of an antilipopolysaccharide factor from2 shrimp and its possible lipid a binding site
31	dlijwc	Alignment	not modelled	8.2	37	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Recombinase DNA-binding domain
32	d1g3wa2	Alignment	not modelled	8.1	14	Fold: Iron-dependent repressor protein, dimerization domain Superfamily: Iron-dependent repressor protein, dimerization domain Family: Iron-dependent repressor protein, dimerization domain
33	d2dsxa1	Alignment	not modelled	8.0	67	Fold: Rubredoxin-like Superfamily: Rubredoxin-like Family: Rubredoxin
34	d2rdva	Alignment	not modelled	7.6	67	Fold: Rubredoxin-like Superfamily: Rubredoxin-like Family: Rubredoxin
35	d1f43a	Alignment	not modelled	7.6	25	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Homeodomain
36	d1h7va	Alignment	not modelled	7.5	67	Fold: Rubredoxin-like Superfamily: Rubredoxin-like Family: Rubredoxin
37	d2hrkb1	Alignment	not modelled	7.5	19	Fold: GST C-terminal domain-like Superfamily: GST C-terminal domain-like Family: Arc1p N-terminal domain-like
38	d1brfa	Alignment	not modelled	7.4	67	Fold: Rubredoxin-like Superfamily: Rubredoxin-like Family: Rubredoxin
39	d1yz8p1	Alignment	not modelled	7.3	19	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Homeodomain
40	d1rb9a	Alignment	not modelled	7.2	67	Fold: Rubredoxin-like Superfamily: Rubredoxin-like Family: Rubredoxin
41	d1iu5a	Alignment	not modelled	7.2	67	Fold: Rubredoxin-like Superfamily: Rubredoxin-like Family: Rubredoxin
42	d1p7ia	Alignment	not modelled	7.2	25	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Homeodomain
43	d1lfba	Alignment	not modelled	7.1	21	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Homeodomain
44	d1sana	Alignment	not modelled	7.1	14	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Homeodomain
45	d1s24a	Alignment	not modelled	7.1	50	Fold: Rubredoxin-like Superfamily: Rubredoxin-like Family: Rubredoxin
46	c1s24A	Alignment	not modelled	7.1	50	PDB header: electron transport Chain: A: PDB Molecule: rubredoxin 2; PDBTitle: rubredoxin domain ii from pseudomonas oleovorans
47	d1lroa	Alignment	not modelled	7.0	67	Fold: Rubredoxin-like Superfamily: Rubredoxin-like Family: Rubredoxin
48	d1zl8a1	Alignment	not modelled	7.0	25	Fold: L27 domain Superfamily: L27 domain Family: L27 domain
49	d1x93a1	Alignment	not modelled	7.0	50	Fold: Ribbon-helix-helix Superfamily: Ribbon-helix-helix Family: CopG-like
50	c1x93B	Alignment	not modelled	7.0	50	PDB header: transcription Chain: B: PDB Molecule: hypothetical protein hp0222; PDBTitle: nmr structure of helicobacter pylori hp0222
51	c2lcgA	Alignment	not modelled	6.9	7	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: solution nmr structure of protein rmet_5065 from ralstonia2 metallidurans, northeast structural genomics consortium target crr115
52	c3fhkF	Alignment	not modelled	6.8	22	PDB header: structural genomics, unknown function Chain: F: PDB Molecule: upf0403 protein yphp; PDBTitle: crystal structure of apc1446, b.subtilis yphp disulfide2 isomerase
53	d1ocpa	Alignment	not modelled	6.7	13	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Homeodomain
54	c2v3bB	Alignment	not modelled	6.7	50	PDB header: oxidoreductase Chain: B: PDB Molecule: rubredoxin 2; PDBTitle: crystal structure of the electron transfer complex2 rubredoxin - rubredoxin reductase from pseudomonas3 aeruginosa.
55	d4rxna	Alignment	not modelled	6.7	67	Fold: Rubredoxin-like Superfamily: Rubredoxin-like Family: Rubredoxin
56	d1dx8a	Alignment	not modelled	6.7	67	Fold: Rubredoxin-like Superfamily: Rubredoxin-like Family: Rubredoxin

57	d1ftza_	Alignment	not modelled	6.7	13	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Homeodomain
58	d1bcoa1	Alignment	not modelled	6.6	35	Fold: mu transposase, C-terminal domain Superfamily: mu transposase, C-terminal domain Family: mu transposase, C-terminal domain
59	d9anta_	Alignment	not modelled	6.5	13	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Homeodomain
60	d1jgga_	Alignment	not modelled	6.4	19	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Homeodomain
61	d2hddb_	Alignment	not modelled	6.4	25	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Homeodomain
62	c2da1A_	Alignment	not modelled	6.4	19	PDB header: transcription Chain: A: PDB Molecule: alpha-fetoprotein enhancer binding protein; PDBTitle: solution structure of the first homeobox domain of at-2 binding transcription factor 1 (atbf1)
63	d2craa1	Alignment	not modelled	6.4	13	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Homeodomain
64	d1qasa3	Alignment	not modelled	6.3	83	Fold: TIM beta/alpha-barrel Superfamily: PLC-like phosphodiesterases Family: Mammalian PLC
65	c2dmqA_	Alignment	not modelled	6.3	13	PDB header: dna binding protein Chain: A: PDB Molecule: lim/homeobox protein lhx9; PDBTitle: solution structure of the homeobox domain of lim/homeobox2 protein lhx9
66	c2dmuA_	Alignment	not modelled	6.0	25	PDB header: dna binding protein Chain: A: PDB Molecule: homeobox protein gooseoid; PDBTitle: solution structure of the homeobox domain of homeobox2 protein gooseoid
67	d1fjla_	Alignment	not modelled	6.0	25	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Homeodomain
68	d1wh5a_	Alignment	not modelled	6.0	13	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Homeodomain
69	d1gvda_	Alignment	not modelled	5.8	25	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Myb/SANT domain
70	d1y74a1	Alignment	not modelled	5.8	25	Fold: L27 domain Superfamily: L27 domain Family: L27 domain
71	d1hcra_	Alignment	not modelled	5.7	37	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Recombinase DNA-binding domain
72	c2da4A_	Alignment	not modelled	5.6	25	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical protein dkfzp686k21156; PDBTitle: solution structure of the homeobox domain of the2 hypothetical protein, dkfzp686k21156
73	c2kn9A_	Alignment	not modelled	5.6	50	PDB header: electron transport Chain: A: PDB Molecule: rubredoxin; PDBTitle: solution structure of zinc-substituted rubredoxin b (rv3250c) from2 mycobacterium tuberculosis. seattle structural genomics center for3 infectious disease target mytud.01635.a
74	c2l9rA_	Alignment	not modelled	5.5	19	PDB header: transcription Chain: A: PDB Molecule: homeobox protein nkx-3.1; PDBTitle: solution nmr structure of homeobox domain of homeobox protein nkx-3.12 from homo sapiens, northeast structural genomics consortium target3 hr6470a
75	d1q8la_	Alignment	not modelled	5.4	18	Fold: Ferredoxin-like Superfamily: HMA, heavy metal-associated domain Family: HMA, heavy metal-associated domain
76	d2o5ha1	Alignment	not modelled	5.4	21	Fold: NMB0513-like Superfamily: NMB0513-like Family: NMB0513-like
77	c2hfpB_	Alignment	not modelled	5.4	83	PDB header: transcription Chain: B: PDB Molecule: src peptide fragment; PDBTitle: crystal structure of ppar gamma with n-sulfonyl-2-indole2 carboxamide ligands
78	d2obba1	Alignment	not modelled	5.4	24	Fold: HAD-like Superfamily: HAD-like Family: BT0820-like
79	d1eexa_	Alignment	not modelled	5.3	60	Fold: TIM beta/alpha-barrel Superfamily: Cobalamin (vitamin B12)-dependent enzymes Family: Diol dehydratase, alpha subunit
80	c1fm9E_	Alignment	not modelled	5.3	83	PDB header: transcription Chain: E: PDB Molecule: steroid receptor coactivator; PDBTitle: the 2.1 angstrom resolution crystal structure of the2 heterodimer of the human rxralpha and ppargamma ligand3 binding domains respectively bound with 9-cis retinoic4 acid and gi262570 and co-activator peptides.
81	c1k74E_	Alignment	not modelled	5.3	83	PDB header: transcription Chain: E: PDB Molecule: steroid receptor coactivator; PDBTitle: the 2.3 angstrom resolution crystal structure of the2 heterodimer of the human ppargamma and rxralpha ligand3 binding domains respectively bound with gw409544 and 9-cis4 retinoic acid and co-activator peptides.
						PDB header: transcription

82	c1fm6E_	 Alignment	not modelled	5.3	83	Chain: E: PDB Molecule: steroid receptor coactivator; PDBTitle: the 2.1 angstrom resolution crystal structure of the2 heterodimer of the human rxralpha and ppargamma ligand3 binding domains respectively bound with 9-cis retinoic4 acid and rosiglitazone and co-activator peptides.
83	c2djnA_	 Alignment	not modelled	5.3	19	PDB header: transcription Chain: A: PDB Molecule: homeobox protein dlx-5; PDBTitle: the solution structure of the homeobox domain of human2 homeobox protein dlx-5
84	c3kmgE_	 Alignment	not modelled	5.3	83	PDB header: transcription Chain: E: PDB Molecule: steroid receptor coactivator-1; PDBTitle: the x-ray crystal structure of ppar-gamma in complex with an indole2 derivative modulator, gsk538, and an src-1 peptide
85	c1fm6V_	 Alignment	not modelled	5.3	83	PDB header: transcription Chain: V: PDB Molecule: steroid receptor coactivator; PDBTitle: the 2.1 angstrom resolution crystal structure of the2 heterodimer of the human rxralpha and ppargamma ligand3 binding domains respectively bound with 9-cis retinoic4 acid and rosiglitazone and co-activator peptides.
86	c1p8dC_	 Alignment	not modelled	5.3	71	PDB header: membrane protein/protein binding Chain: C: PDB Molecule: nuclear receptor coactivator 1 isoform 3; PDBTitle: x-ray crystal structure of lxr ligand binding domain with 24(s),25-2 epoxycholesterol
87	dlb8ia_	 Alignment	not modelled	5.3	13	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Homeodomain
88	c1p8dD_	 Alignment	not modelled	5.3	83	PDB header: transcription Chain: D: PDB Molecule: nuclear receptor coactivator 1 isoform 3; PDBTitle: x-ray crystal structure of lxr ligand binding domain with 24(s),25-2 epoxycholesterol
89	c1k7IB_	 Alignment	not modelled	5.3	71	PDB header: transcription Chain: B: PDB Molecule: steroid receptor coactivator; PDBTitle: the 2.5 angstrom resolution crystal structure of the human2 pparalpha ligand binding domain bound with gw409544 and a3 co-activator peptide.
90	c1k7ID_	 Alignment	not modelled	5.3	71	PDB header: transcription Chain: D: PDB Molecule: steroid receptor coactivator; PDBTitle: the 2.5 angstrom resolution crystal structure of the human2 pparalpha ligand binding domain bound with gw409544 and a3 co-activator peptide.
91	c1k7IF_	 Alignment	not modelled	5.3	71	PDB header: transcription Chain: F: PDB Molecule: steroid receptor coactivator; PDBTitle: the 2.5 angstrom resolution crystal structure of the human2 pparalpha ligand binding domain bound with gw409544 and a3 co-activator peptide.
92	c1k7IH_	 Alignment	not modelled	5.3	71	PDB header: transcription Chain: H: PDB Molecule: steroid receptor coactivator; PDBTitle: the 2.5 angstrom resolution crystal structure of the human2 pparalpha ligand binding domain bound with gw409544 and a3 co-activator peptide.
93	c2ypnA_	 Alignment	not modelled	5.2	19	PDB header: transferase Chain: A: PDB Molecule: protein (hydroxymethylbilane synthase); PDBTitle: hydroxymethylbilane synthase
94	c2dmsA_	 Alignment	not modelled	5.1	25	PDB header: dna binding protein Chain: A: PDB Molecule: homeobox protein otx2; PDBTitle: solution structure of the homeobox domain of homeobox2 protein otx2