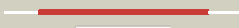













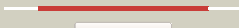









Phyre2

Email	l.a.kelley@imperial.ac.uk
Description	globin_example
Date	Sat Sep 6 16:42:08 BST 2014
Unique Job ID	ca8acc6688d7f918

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d3sdha_	 Alignment		100.0	100	Fold: Globin-like Superfamily: Globin-like Family: Globins
2	d1scta_	 Alignment		100.0	53	Fold: Globin-like Superfamily: Globin-like Family: Globins
3	c3pt8B_	 Alignment		100.0	24	PDB header: oxygen transport Chain: B: PDB Molecule: hemoglobin iii; PDBTitle: structure of hbii-iii-cn from lucina pectinata at ph 5.0
4	d1sctb_	 Alignment		100.0	56	Fold: Globin-like Superfamily: Globin-like Family: Globins
5	c2olpB_	 Alignment		100.0	25	PDB header: oxygen storage/transport Chain: B: PDB Molecule: hemoglobin ii; PDBTitle: structure and ligand selection of hemoglobin ii from lucina pectinata
6	d1mbaa_	 Alignment		100.0	24	Fold: Globin-like Superfamily: Globin-like Family: Globins
7	c4b4yA_	 Alignment		100.0	14	PDB header: transport protein Chain: A: PDB Molecule: neuroglobin; PDBTitle: crystal structure of the neuroglobin from the photosymbiotic2 marine acoel symsagittifera roscoffensis
8	d1hlba_	 Alignment		100.0	24	Fold: Globin-like Superfamily: Globin-like Family: Globins
9	c1o1nA_	 Alignment		100.0	17	PDB header: oxygen storage/transport Chain: A: PDB Molecule: hemoglobin alpha chain; PDBTitle: deoxy hemoglobin (a-glyglygly-c:v1m,l29w; b,d:v1m)
10	d1b0ba_	 Alignment		100.0	19	Fold: Globin-like Superfamily: Globin-like Family: Globins
11	c1x3kA_	 Alignment		100.0	17	PDB header: oxygen storage/transport Chain: A: PDB Molecule: hemoglobin component v; PDBTitle: crystal structure of a hemoglobin component (ta-v) from2 tokunagayusurika akamusi

12	d2lhba_	Alignment		100.0	18	Fold: Globin-like Superfamily: Globin-like Family: Globins
13	c1ut0A_	Alignment		100.0	23	PDB header: oxygen transport Chain: A: PDB Molecule: cytoglobin; PDBTitle: crystal structure of cytoglobin: the fourth globin type2 discovered in man displays heme hexa-coordination
14	d1urva_	Alignment		100.0	23	Fold: Globin-like Superfamily: Globin-like Family: Globins
15	d1itha_	Alignment		100.0	17	Fold: Globin-like Superfamily: Globin-like Family: Globins
16	d1h97a_	Alignment		100.0	18	Fold: Globin-like Superfamily: Globin-like Family: Globins
17	c2zs0A_	Alignment		100.0	16	PDB header: oxygen storage, oxygen transport Chain: A: PDB Molecule: extracellular giant hemoglobin major globin subunit a1; PDBTitle: structural basis for the heterotropic and homotropic interactions of2 invertebrate giant hemoglobin
18	d1x9fd_	Alignment		100.0	18	Fold: Globin-like Superfamily: Globin-like Family: Globins
19	c1yhuW_	Alignment		100.0	21	PDB header: oxygen storage/transport Chain: W: PDB Molecule: hemoglobin b1a chain; PDBTitle: crystal structure of riftia pachyptila c1 hemoglobin reveals novel2 assembly of 24 subunits.
20	d1hbga_	Alignment		100.0	18	Fold: Globin-like Superfamily: Globin-like Family: Globins
21	d1hlma_	Alignment	not modelled	100.0	17	Fold: Globin-like Superfamily: Globin-like Family: Globins
22	c4bjaA_	Alignment	not modelled	100.0	14	PDB header: transport protein Chain: A: PDB Molecule: protein glb-12; PDBTitle: globin-like protein glb-12 from c.elegans
23	d1x9fb_	Alignment	not modelled	100.0	22	Fold: Globin-like Superfamily: Globin-like Family: Globins
24	c3wctA_	Alignment	not modelled	100.0	18	PDB header: oxygen transport Chain: A: PDB Molecule: a1 globin chain of giant v2 hemoglobin; PDBTitle: the structure of a deoxygenated 400 kda hemoglobin provides a more2 accurate description of the cooperative mechanism of giant3 hemoglobins: oxygenated form
25	d1it2a_	Alignment	not modelled	100.0	13	Fold: Globin-like Superfamily: Globin-like Family: Globins
26	c1yhuA_	Alignment	not modelled	100.0	20	PDB header: oxygen storage/transport Chain: A: PDB Molecule: hemoglobin a1 chain; PDBTitle: crystal structure of riftia pachyptila c1 hemoglobin reveals novel2 assembly of 24 subunits.
27	d1cqxa1	Alignment	not modelled	100.0	16	Fold: Globin-like Superfamily: Globin-like Family: Globins
28	c2vywA_	Alignment	not modelled	100.0	22	PDB header: oxygen binding Chain: A: PDB Molecule: hemoglobin; PDBTitle: hemoglobin (hb2) from trematode fasciola hepatica
						Fold: Globin-like

29	d1d8ua_	Alignment	not modelled	100.0	15	Superfamily: Globin-like Family: Globins
30	c1yhuX_	Alignment	not modelled	100.0	18	PDB header: oxygen storage/transport Chain: X: PDB Molecule: hemoglobin b2 chain; PDBTitle: crystal structure of riftia pachyptila c1 hemoglobin reveals novel2 assembly of 24 subunits.
31	c2c0kB_	Alignment	not modelled	100.0	16	PDB header: oxygen transport Chain: B: PDB Molecule: hemoglobin; PDBTitle: the structure of hemoglobin from the botfly gasterophilus2 intestinalis
32	c1yhuJ_	Alignment	not modelled	100.0	18	PDB header: oxygen storage/transport Chain: J: PDB Molecule: giant hemoglobins b chain; PDBTitle: crystal structure of riftia pachyptila c1 hemoglobin reveals novel2 assembly of 24 subunits.
33	d1uc3a_	Alignment	not modelled	100.0	19	Fold: Globin-like Superfamily: Globin-like Family: Globins
34	d1fsla_	Alignment	not modelled	100.0	18	Fold: Globin-like Superfamily: Globin-like Family: Globins
35	d1j6a_	Alignment	not modelled	100.0	20	Fold: Globin-like Superfamily: Globin-like Family: Globins
36	c2d2mB_	Alignment	not modelled	100.0	18	PDB header: oxygen storage/transport Chain: B: PDB Molecule: giant hemoglobin, a2(a5) globin chain; PDBTitle: structure of an extracellular giant hemoglobin of the2 gutless beard worm oligobranchia mashkoi
37	d1gvha1	Alignment	not modelled	100.0	19	Fold: Globin-like Superfamily: Globin-like Family: Globins
38	c2bk9A_	Alignment	not modelled	100.0	23	PDB header: oxygen transport Chain: A: PDB Molecule: cg9734-pa; PDBTitle: drosophila melanogaster globin
39	d1v4wa_	Alignment	not modelled	100.0	19	Fold: Globin-like Superfamily: Globin-like Family: Globins
40	d1mwca_	Alignment	not modelled	100.0	22	Fold: Globin-like Superfamily: Globin-like Family: Globins
41	d1mbsa_	Alignment	not modelled	100.0	22	Fold: Globin-like Superfamily: Globin-like Family: Globins
42	d1x9fc_	Alignment	not modelled	100.0	23	Fold: Globin-like Superfamily: Globin-like Family: Globins
43	d2gdma_	Alignment	not modelled	100.0	14	Fold: Globin-like Superfamily: Globin-like Family: Globins
44	d2mm1a_	Alignment	not modelled	100.0	23	Fold: Globin-like Superfamily: Globin-like Family: Globins
45	d1outa_	Alignment	not modelled	100.0	20	Fold: Globin-like Superfamily: Globin-like Family: Globins
46	d1gcva_	Alignment	not modelled	100.0	20	Fold: Globin-like Superfamily: Globin-like Family: Globins
47	c3wctD_	Alignment	not modelled	100.0	19	PDB header: oxygen transport Chain: D: PDB Molecule: b1 globin chain of giant v2 hemoglobin; PDBTitle: the structure of a deoxygenated 400 kda hemoglobin provides a more2 accurate description of the cooperative mechanism of giant3 hemoglobins: oxygenated form
48	d1jebb_	Alignment	not modelled	100.0	26	Fold: Globin-like Superfamily: Globin-like Family: Globins
49	d3d1ka1	Alignment	not modelled	100.0	18	Fold: Globin-like Superfamily: Globin-like Family: Globins
50	d1spga_	Alignment	not modelled	100.0	20	Fold: Globin-like Superfamily: Globin-like Family: Globins
51	c3bomC_	Alignment	not modelled	100.0	21	PDB header: oxygen storage/transport Chain: C: PDB Molecule: hemoglobin subunit alpha-4; PDBTitle: crystal structure of trout hemoglobin at 1.35 angstrom resolution
52	d1a4fa_	Alignment	not modelled	100.0	16	Fold: Globin-like Superfamily: Globin-like Family: Globins
53	c1x46A_	Alignment	not modelled	100.0	19	PDB header: oxygen storage/transport Chain: A: PDB Molecule: hemoglobin component vii; PDBTitle: crystal structure of a hemoglobin component (ta-vii) from2 tokunagayusurika akamusi
54	d1lhta_	Alignment	not modelled	100.0	21	Fold: Globin-like Superfamily: Globin-like Family: Globins
55	d1qpwa_	Alignment	not modelled	100.0	19	Fold: Globin-like Superfamily: Globin-like Family: Globins
						Fold: Globin-like

56	d2v1fa1	Alignment	not modelled	100.0	19	Superfamily: Globin-like Family: Globins
57	d1xq5a	Alignment	not modelled	100.0	19	Fold: Globin-like Superfamily: Globin-like Family: Globins
58	c2d2mC	Alignment	not modelled	100.0	16	PDB header: oxygen storage/transport Chain: C: PDB Molecule: giant hemoglobin, b2(c) globin chain; PDBTitle: structure of an extracellular giant hemoglobin of the2 gutless beard worm oligobrachia mashikoi
59	d1cg5a	Alignment	not modelled	100.0	23	Fold: Globin-like Superfamily: Globin-like Family: Globins
60	d1jl7a	Alignment	not modelled	100.0	17	Fold: Globin-like Superfamily: Globin-like Family: Globins
61	d1a6ma	Alignment	not modelled	100.0	23	Fold: Globin-like Superfamily: Globin-like Family: Globins
62	d1q1fa	Alignment	not modelled	100.0	17	Fold: Globin-like Superfamily: Globin-like Family: Globins
63	d2d5xb1	Alignment	not modelled	100.0	22	Fold: Globin-like Superfamily: Globin-like Family: Globins
64	d1oj6a	Alignment	not modelled	100.0	17	Fold: Globin-like Superfamily: Globin-like Family: Globins
65	d1x9fa	Alignment	not modelled	100.0	18	Fold: Globin-like Superfamily: Globin-like Family: Globins
66	d1i3da	Alignment	not modelled	100.0	23	Fold: Globin-like Superfamily: Globin-like Family: Globins
67	d2d5xa1	Alignment	not modelled	100.0	17	Fold: Globin-like Superfamily: Globin-like Family: Globins
68	d3bj1b1	Alignment	not modelled	100.0	21	Fold: Globin-like Superfamily: Globin-like Family: Globins
69	d2dn3b1	Alignment	not modelled	100.0	23	Fold: Globin-like Superfamily: Globin-like Family: Globins
70	c3s1jC	Alignment	not modelled	100.0	18	PDB header: oxygen transport, oxygen storage Chain: C: PDB Molecule: hemoglobin-like flavoprotein; PDBTitle: crystal structure of acetate-bound hell's gate globin i
71	d1spgb	Alignment	not modelled	100.0	24	Fold: Globin-like Superfamily: Globin-like Family: Globins
72	d1hbrb	Alignment	not modelled	100.0	25	Fold: Globin-like Superfamily: Globin-like Family: Globins
73	d1outb	Alignment	not modelled	99.9	22	Fold: Globin-like Superfamily: Globin-like Family: Globins
74	d1v4wb	Alignment	not modelled	99.9	17	Fold: Globin-like Superfamily: Globin-like Family: Globins
75	d1fhjb	Alignment	not modelled	99.9	25	Fold: Globin-like Superfamily: Globin-like Family: Globins
76	d1qpwb	Alignment	not modelled	99.9	22	Fold: Globin-like Superfamily: Globin-like Family: Globins
77	c1cqxB	Alignment	not modelled	99.9	16	PDB header: lipid binding protein Chain: B: PDB Molecule: flavoheмоprotein; PDBTitle: crystal structure of the flavohemoglobin from alcaligenes eutrophus at2 1.75 a resolution
78	d1fhja	Alignment	not modelled	99.9	17	Fold: Globin-like Superfamily: Globin-like Family: Globins
79	d1cg5b	Alignment	not modelled	99.9	21	Fold: Globin-like Superfamily: Globin-like Family: Globins
80	d2aa1b1	Alignment	not modelled	99.9	21	Fold: Globin-like Superfamily: Globin-like Family: Globins
81	d1wmub	Alignment	not modelled	99.9	21	Fold: Globin-like Superfamily: Globin-like Family: Globins
82	d2qfka1	Alignment	not modelled	99.9	12	Fold: Globin-like Superfamily: Globin-like Family: Globins
83	d1shrb	Alignment	not modelled	99.9	22	Fold: Globin-like Superfamily: Globin-like Family: Globins

84	d1jeba_	Alignment	not modelled	99.9	19	Fold: Globin-like Superfamily: Globin-like Family: Globins
85	d2h8fb1	Alignment	not modelled	99.9	20	Fold: Globin-like Superfamily: Globin-like Family: Globins
86	d1ecda_	Alignment	not modelled	99.9	15	Fold: Globin-like Superfamily: Globin-like Family: Globins
87	d1hbra_	Alignment	not modelled	99.9	25	Fold: Globin-like Superfamily: Globin-like Family: Globins
88	c2zs1D_	Alignment	not modelled	99.9	17	PDB header: oxygen storage, oxygen transport Chain: D: PDB Molecule: extracellular giant hemoglobin major globin subunit b1; PDBTitle: structural basis for the heterotropic and homotropic interactions of 2 invertebrate giant hemoglobin
89	d3d1kb1	Alignment	not modelled	99.9	23	Fold: Globin-like Superfamily: Globin-like Family: Globins
90	d1a4fb_	Alignment	not modelled	99.9	22	Fold: Globin-like Superfamily: Globin-like Family: Globins
91	c3wfwA_	Alignment	not modelled	99.9	14	PDB header: oxygen transport Chain: A: PDB Molecule: hemoglobin-like flavoprotein fused to roadblock/lc7 domain; PDBTitle: crystal structure of the closed form of the hgbrl's globin domain
92	d1a9we_	Alignment	not modelled	99.9	23	Fold: Globin-like Superfamily: Globin-like Family: Globins
93	d1wmua_	Alignment	not modelled	99.9	20	Fold: Globin-like Superfamily: Globin-like Family: Globins
94	d1ch4a_	Alignment	not modelled	99.9	20	Fold: Globin-like Superfamily: Globin-like Family: Globins
95	c1gvhA_	Alignment	not modelled	99.9	19	PDB header: oxidoreductase Chain: A: PDB Molecule: flavo-hemoprotein; PDBTitle: the x-ray structure of ferric escherichia coli2 flavohemoglobin reveals an unsuspected geometry of the3 distal heme pocket
96	d1myta_	Alignment	not modelled	99.9	21	Fold: Globin-like Superfamily: Globin-like Family: Globins
97	d2dn3a1	Alignment	not modelled	99.9	17	Fold: Globin-like Superfamily: Globin-like Family: Globins
98	d2qssa1	Alignment	not modelled	99.9	20	Fold: Globin-like Superfamily: Globin-like Family: Globins
99	c2wy4A_	Alignment	not modelled	99.9	14	PDB header: oxygen transport Chain: A: PDB Molecule: single domain haemoglobin; PDBTitle: structure of bacterial globin from campylobacter jejuni at2 1.35 a resolution
100	d2qssb1	Alignment	not modelled	99.9	23	Fold: Globin-like Superfamily: Globin-like Family: Globins
101	d1vhba_	Alignment	not modelled	99.9	18	Fold: Globin-like Superfamily: Globin-like Family: Globins
102	c4g1bB_	Alignment	not modelled	99.9	13	PDB header: oxidoreductase Chain: B: PDB Molecule: flavo-hemoglobin; PDBTitle: x-ray structure of yeast flavohemoglobin in complex with econazole
103	c2wtgA_	Alignment	not modelled	99.9	16	PDB header: oxygen transport Chain: A: PDB Molecule: globin-like protein; PDBTitle: high resolution 3d structure of c.elegans globin-like2 protein glb-1
104	d1gcvb_	Alignment	not modelled	99.9	19	Fold: Globin-like Superfamily: Globin-like Family: Globins
105	c3qqrA_	Alignment	not modelled	99.9	16	PDB header: oxygen transport Chain: A: PDB Molecule: non-legume hemoglobin; PDBTitle: crystal structure of parasponia hemoglobin; differential heme2 coordination is linked to quaternary structure
106	d1emya_	Alignment	not modelled	99.9	19	Fold: Globin-like Superfamily: Globin-like Family: Globins
107	d1hdsa_	Alignment	not modelled	99.9	18	Fold: Globin-like Superfamily: Globin-like Family: Globins
108	d1asha_	Alignment	not modelled	99.9	10	Fold: Globin-like Superfamily: Globin-like Family: Globins
109	c3mkbD_	Alignment	not modelled	99.9	18	PDB header: oxygen storage, oxygen transport Chain: D: PDB Molecule: hemoglobin subunit beta; PDBTitle: crystal structure determination of shortfin mako (isurus oxyrinchus)2 hemoglobin at 1.9 angstrom resolution
110	c3mvrB_	Alignment	not modelled	99.9	13	PDB header: electron transport Chain: B: PDB Molecule: globin protein 6;

110	c3mvcb_	Alignment	not modelled	99.9	19	PDBTitle: high resolution crystal structure of the heme domain of glb-6 from c.2 elegans
111	d1hdsb_	Alignment	not modelled	99.9	22	Fold: Globin-like Superfamily: Globin-like Family: Globins
112	d1tu9a_	Alignment	not modelled	99.8	11	Fold: Globin-like Superfamily: Globin-like Family: Globins
113	d1kr7a_	Alignment	not modelled	99.8	16	Fold: Globin-like Superfamily: Globin-like Family: Nerve tissue mini-hemoglobin (neural globin)
114	c2w31A_	Alignment	not modelled	99.2	10	PDB header: oxygen transport Chain: A: PDB Molecule: globin; PDBTitle: globin domain of geobacter sulfurreducens globin-coupled2 sensor
115	d1or4a_	Alignment	not modelled	98.6	11	Fold: Globin-like Superfamily: Globin-like Family: Globins
116	c2veeC_	Alignment	not modelled	98.1	14	PDB header: transport protein Chain: C: PDB Molecule: protoglobin; PDBTitle: structure of protoglobin from methanosarcina acetivorans2 c2a
117	d1ux8a_	Alignment	not modelled	97.9	7	Fold: Globin-like Superfamily: Globin-like Family: Truncated hemoglobin
118	d1ngka_	Alignment	not modelled	97.1	13	Fold: Globin-like Superfamily: Globin-like Family: Truncated hemoglobin
119	c2xykB_	Alignment	not modelled	97.0	10	PDB header: oxygen storage/transport Chain: B: PDB Molecule: 2-on-2 hemoglobin; PDBTitle: group ii 2-on-2 hemoglobin from the plant pathogen2 agrobacterium tumefaciens
120	c2bmmA_	Alignment	not modelled	96.9	8	PDB header: oxygen storage/transport Chain: A: PDB Molecule: thermostable hemoglobin from thermobifida fusca; PDBTitle: x-ray structure of a novel thermostable hemoglobin from the2 actinobacterium thermobifida fusca