
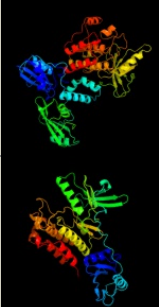

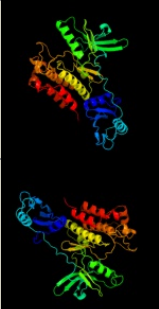

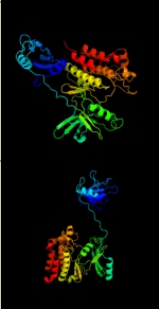
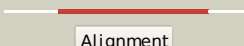

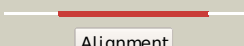
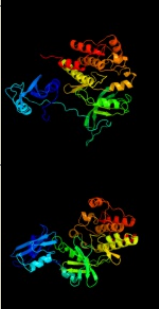
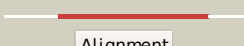
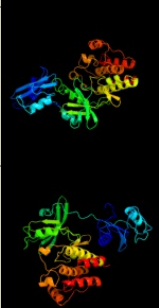
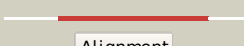
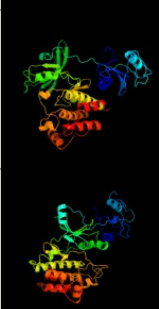

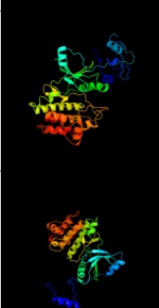



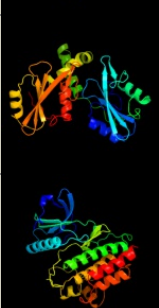













Phyre2

Email	l.a.kelley@imperial.ac.uk
Description	P43405
Date	Fri May 25 09:37:32 BST 2012
Unique Job ID	2db15a2455b16f33

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c2ozoA_	 Alignment		100.0	60	PDB header: transferase Chain: A: PDB Molecule: tyrosine-protein kinase zap-70; PDBTitle: autoinhibited intact human zap-70
2	c2fo0A_	 Alignment		100.0	40	PDB header: transferase Chain: A: PDB Molecule: proto-oncogene tyrosine-protein kinase abl1 (1b isoform); PDBTitle: organization of the sh3-sh2 unit in active and inactive forms of the2 c-abl tyrosine kinase
3	c1oplA_	 Alignment		100.0	40	PDB header: transferase Chain: A: PDB Molecule: proto-oncogene tyrosine-protein kinase; PDBTitle: structural basis for the auto-inhibition of c-abl tyrosine2 kinase
4	c1y57A_	 Alignment		100.0	40	PDB header: transferase Chain: A: PDB Molecule: proto-oncogene tyrosine-protein kinase src; PDBTitle: structure of unphosphorylated c-src in complex with an inhibitor
5	c2h8hA_	 Alignment		100.0	40	PDB header: transferase Chain: A: PDB Molecule: proto-oncogene tyrosine-protein kinase src; PDBTitle: src kinase in complex with a quinazoline inhibitor
6	c1k9aB_	 Alignment		100.0	46	PDB header: transferase Chain: B: PDB Molecule: carboxyl-terminal src kinase; PDBTitle: crystal structure analysis of full-length carboxyl-terminal2 src kinase at 2.5 a resolution
7	c2c0iA_	 Alignment		100.0	41	PDB header: transferase Chain: A: PDB Molecule: tyrosine-protein kinase hck; PDBTitle: src family kinase hck with bound inhibitor a-420983
8	c3cblA_	 Alignment		100.0	37	PDB header: transferase Chain: A: PDB Molecule: proto-oncogene tyrosine-protein kinase fes/fps; PDBTitle: crystal structure of human feline sarcoma viral oncogene homologue (v-2 fes) in complex with staurosporine and a consensus peptide
9	c2j0kB_	 Alignment		100.0	37	PDB header: transferase Chain: B: PDB Molecule: focal adhesion kinase 1; PDBTitle: crystal structure of a fragment of focal adhesion kinase2 containing the ferm and kinase domains.
10	c2oq1A_	 Alignment		100.0	56	PDB header: transferase Chain: A: PDB Molecule: tyrosine-protein kinase zap-70; PDBTitle: tandem sh2 domains of zap-70 with 19-mer zeta1 peptide
11	d1u59a_	 Alignment		100.0	61	Fold: Protein kinase-like (PK-like) Superfamily: Protein kinase-like (PK-like) Family: Protein kinases, catalytic subunit

12	c3zzwA	Alignment		100.0	35	PDB header: transferase Chain: A: PDB Molecule: tyrosine-protein kinase transmembrane receptor ror2; PDBTitle: crystal structure of the kinase domain of ror2
13	c3pfqA	Alignment		100.0	19	PDB header: transferase Chain: A: PDB Molecule: protein kinase c beta type; PDBTitle: crystal structure and allosteric activation of protein kinase c beta2 ii
14	d1qcfa3	Alignment		100.0	35	Fold: Protein kinase-like (PK-like) Superfamily: Protein kinase-like (PK-like) Family: Protein kinases, catalytic subunit
15	c2acxB	Alignment		100.0	21	PDB header: transferase Chain: B: PDB Molecule: g protein-coupled receptor kinase 6; PDBTitle: crystal structure of g protein coupled receptor kinase 6 bound to2 amppnp
16	c3qa8A	Alignment		100.0	27	PDB header: immune system, signaling protein Chain: A: PDB Molecule: mgc80376 protein; PDBTitle: crystal structure of inhibitor of kappa b kinase beta
17	d1opja	Alignment		100.0	39	Fold: Protein kinase-like (PK-like) Superfamily: Protein kinase-like (PK-like) Family: Protein kinases, catalytic subunit
18	d1xbba	Alignment		100.0	99	Fold: Protein kinase-like (PK-like) Superfamily: Protein kinase-like (PK-like) Family: Protein kinases, catalytic subunit
19	c1ym7C	Alignment		100.0	21	PDB header: transferase Chain: C: PDB Molecule: beta-adrenergic receptor kinase 1; PDBTitle: g protein-coupled receptor kinase 2 (grk2)
20	c2ivsA	Alignment		100.0	39	PDB header: transferase Chain: A: PDB Molecule: proto-oncogene tyrosine-protein kinase receptor PDBTitle: crystal structure of non-phosphorylated ret tyrosine kinase2 domain
21	c3c4yA	Alignment	not modelled	100.0	22	PDB header: transferase Chain: A: PDB Molecule: rhodopsin kinase; PDBTitle: crystal structure of apo form of g protein coupled receptor kinase 12 at 7.51a
22	c3ckxA	Alignment	not modelled	100.0	25	PDB header: transferase Chain: A: PDB Molecule: serine/threonine-protein kinase 24; PDBTitle: crystal structure of sterile 20-like kinase 3 (mst3, stk24)2 in complex with staurosporine
23	d1qpca	Alignment	not modelled	100.0	40	Fold: Protein kinase-like (PK-like) Superfamily: Protein kinase-like (PK-like) Family: Protein kinases, catalytic subunit
24	c3g0eA	Alignment	not modelled	100.0	34	PDB header: transferase Chain: A: PDB Molecule: mast/stem cell growth factor receptor; PDBTitle: kit kinase domain in complex with sunitinib
25	c3dpkA	Alignment	not modelled	100.0	35	PDB header: transferase Chain: A: PDB Molecule: macrophage colony-stimulating factor 1 receptor; PDBTitle: cfms tyrosine kinase in complex with a pyridopyrimidinone2 inhibitor
26	d1lufa	Alignment	not modelled	100.0	36	Fold: Protein kinase-like (PK-like) Superfamily: Protein kinase-like (PK-like) Family: Protein kinases, catalytic subunit
27	c1lufA	Alignment	not modelled	100.0	36	PDB header: transferase Chain: A: PDB Molecule: muscle-specific tyrosine kinase receptor musk; PDBTitle: crystal structure of the musk tyrosine kinase: insights2 into receptor autoregulation
28	c1koaA	Alignment	not modelled	100.0	22	PDB header: kinase Chain: A: PDB Molecule: twitchin; PDBTitle: twitchin kinase fragment (c.elegans), autoregulated

					protein2 kinase and immunoglobulin domains PDB header: transferase/transferase inhibitor Chain: A: PDB Molecule: calcium/calmodulin-dependent protein kinase type ii subunit PDBTitle: full-length human camkii
29	c3soaA_	Alignment	not modelled	100.0	20
30	c3q5iA_	Alignment	not modelled	100.0	27
31	d2j4za1	Alignment	not modelled	100.0	24
32	c2vwiC_	Alignment	not modelled	100.0	29
33	c3plsA_	Alignment	not modelled	100.0	33
34	d1k2pa_	Alignment	not modelled	100.0	38
35	c2c30A_	Alignment	not modelled	100.0	22
36	c2pvfA_	Alignment	not modelled	100.0	38
37	c2wtkC_	Alignment	not modelled	100.0	23
38	c2psqA_	Alignment	not modelled	100.0	38
39	d2psqa1	Alignment	not modelled	100.0	38
40	c3lxA_	Alignment	not modelled	100.0	35
41	d3bu3a1	Alignment	not modelled	100.0	35
42	d1t46a_	Alignment	not modelled	100.0	34
43	c1a81E_	Alignment	not modelled	100.0	100
44	c3fbvL_	Alignment	not modelled	100.0	27
45	d1fmka3	Alignment	not modelled	100.0	37
46	d1yhwa1	Alignment	not modelled	100.0	23
47	d1p4oa_	Alignment	not modelled	100.0	31
48	c4eutA_	Alignment	not modelled	100.0	24
49	c3lijA_	Alignment	not modelled	100.0	28
50	d1mp8a_	Alignment	not modelled	100.0	39
51	c2bujA_	Alignment	not modelled	100.0	20
52	c3eygA_	Alignment	not modelled	100.0	37
53	c2a1aB_	Alignment	not modelled	100.0	23
54	d1uwha_	Alignment	not modelled	100.0	28

						Family:Protein kinases, catalytic subunit
55	c2bmcD	Alignment	not modelled	100.0	25	PDB header: transferase Chain: D: PDB Molecule: serine threonine-protein kinase 6; PDBTitle: aurora-2 t287d t288d complexed with pha-680632
56	c2y7jB	Alignment	not modelled	100.0	23	PDB header: transferase Chain: B: PDB Molecule: phosphorylase b kinase gamma catalytic chain, PDBTitle: structure of human phosphorylase kinase, gamma 2
57	c3l9pA	Alignment	not modelled	100.0	35	PDB header: transferase Chain: A: PDB Molecule: anaplastic lymphoma kinase; PDBTitle: crystal structure of the anaplastic lymphoma kinase catalytic domain
58	c3cc6A	Alignment	not modelled	100.0	38	PDB header: transferase Chain: A: PDB Molecule: protein tyrosine kinase 2 beta; PDBTitle: crystal structure of kinase domain of protein tyrosine kinase 2 beta2 (ptk2b)
59	d1phka	Alignment	not modelled	100.0	23	Fold: Protein kinase-like (PK-like) Superfamily: Protein kinase-like (PK-like) Family: Protein kinases, catalytic subunit
60	c3lvpD	Alignment	not modelled	100.0	34	PDB header: transferase Chain: D: PDB Molecule: insulin-like growth factor 1 receptor; PDBTitle: crystal structure of bisphosphorylated igf1-r kinase domain (2p) in2 complex with a bis-azaindole inhibitor
61	d1fgka	Alignment	not modelled	100.0	35	Fold: Protein kinase-like (PK-like) Superfamily: Protein kinase-like (PK-like) Family: Protein kinases, catalytic subunit
62	c3dfaA	Alignment	not modelled	100.0	24	PDB header: transferase Chain: A: PDB Molecule: calcium-dependent protein kinase cgd3_920; PDBTitle: crystal structure of kinase domain of calcium-dependent protein kinase2 cgd3_920 from cryptosporidium parvum
63	c3d9vA	Alignment	not modelled	100.0	22	PDB header: transferase Chain: A: PDB Molecule: rho-associated protein kinase 1; PDBTitle: crystal structure of rock i bound to h-1152p a di-2 methylated variant of fasudil
64	c2clqA	Alignment	not modelled	100.0	25	PDB header: transferase Chain: A: PDB Molecule: mitogen-activated protein kinase kinase kinase 5; PDBTitle: structure of mitogen-activated protein kinase kinase kinase2 5
65	c3lxaA	Alignment	not modelled	100.0	37	PDB header: transferase Chain: A: PDB Molecule: non-receptor tyrosine-protein kinase tyk2; PDBTitle: structural and thermodynamic characterization of the tyk2 and jak32 kinase domains in complex with cp-690550 and cmp-6
66	c2qg5D	Alignment	not modelled	100.0	21	PDB header: transferase Chain: D: PDB Molecule: calcium/calmodulin-dependent protein kinase; PDBTitle: cryptosporidium parvum calcium dependent protein kinase cgd7_1840
67	d2jfla1	Alignment	not modelled	100.0	21	Fold: Protein kinase-like (PK-like) Superfamily: Protein kinase-like (PK-like) Family: Protein kinases, catalytic subunit
68	c1yviA	Alignment	not modelled	100.0	34	PDB header: transferase Chain: A: PDB Molecule: tyrosine-protein kinase jak3; PDBTitle: crystal structure of the jak3 kinase domain in complex with2 a staurosporine analogue
69	d1mqba	Alignment	not modelled	100.0	37	Fold: Protein kinase-like (PK-like) Superfamily: Protein kinase-like (PK-like) Family: Protein kinases, catalytic subunit
70	d1jksa	Alignment	not modelled	100.0	22	Fold: Protein kinase-like (PK-like) Superfamily: Protein kinase-like (PK-like) Family: Protein kinases, catalytic subunit
71	d1jpaa	Alignment	not modelled	100.0	36	Fold: Protein kinase-like (PK-like) Superfamily: Protein kinase-like (PK-like) Family: Protein kinases, catalytic subunit
72	c3hztA	Alignment	not modelled	100.0	29	PDB header: transferase Chain: A: PDB Molecule: calcium-dependent protein kinase 3; PDBTitle: crystal structure of toxoplasma gondii cdpk3, tgme49_105860
73	c2j51A	Alignment	not modelled	100.0	23	PDB header: transferase Chain: A: PDB Molecule: ste20-like serine/threonine-protein kinase; PDBTitle: crystal structure of human ste20-like kinase bound to 5-2 amino-3-((4-(aminosulfonyl)phenyl)amino)-n-(2,6-3 difluorophenyl)-1h-1,2,4-triazole-1-carbothioamide
74	c3d4qA	Alignment	not modelled	100.0	28	PDB header: transferase Chain: A: PDB Molecule: b-raf proto-oncogene serine/threonine-protein kinase; PDBTitle: pyrazole-based inhibitors of b-raf kinase
75	d1sm2a	Alignment	not modelled	100.0	40	Fold: Protein kinase-like (PK-like) Superfamily: Protein kinase-like (PK-like) Family: Protein kinases, catalytic subunit
76	c3p23B	Alignment	not modelled	100.0	25	PDB header: hydrolase, transferase Chain: B: PDB Molecule: serine/threonine-protein kinase/endoribonuclease ire1; PDBTitle: crystal structure of the human kinase and rnase domains in complex2 with adp
77	c1mruB	Alignment	not modelled	100.0	23	PDB header: transferase Chain: B: PDB Molecule: probable serine/threonine-protein kinase pknb; PDBTitle: intracellular ser/thr protein kinase domain of2 mycobacterium tuberculosis pknb.
78	d1ckia	Alignment	not modelled	100.0	20	Fold: Protein kinase-like (PK-like) Superfamily: Protein kinase-like (PK-like) Family: Protein kinases, catalytic subunit

79	c2pziA	Alignment	not modelled	100.0	18	PDB header: transferase Chain: A: PDB Molecule: probable serine/threonine-protein kinase pkgng; PDBTitle: crystal structure of protein kinase pkgng from mycobacterium2 tuberculosis in complex with tetrahydrobenzothiophene ax20017
80	c2w1iB	Alignment	not modelled	100.0	34	PDB header: transferase Chain: B: PDB Molecule: jak2; PDBTitle: structure determination of aurora kinase in complex with2 inhibitor
81	c2qobA	Alignment	not modelled	100.0	35	PDB header: transferase Chain: A: PDB Molecule: ephrin receptor; PDBTitle: human epha3 kinase domain, base structure
82	c3fupB	Alignment	not modelled	100.0	34	PDB header: transferase Chain: B: PDB Molecule: tyrosine-protein kinase jak2; PDBTitle: crystal structures of jak1 and jak2 inhibitor complexes
83	d1fvra	Alignment	not modelled	100.0	35	Fold: Protein kinase-like (PK-like) Superfamily: Protein kinase-like (PK-like) Family: Protein kinases, catalytic subunit
84	c2cgvA	Alignment	not modelled	100.0	22	PDB header: transferase Chain: A: PDB Molecule: serine/threonine-protein kinase chk1; PDBTitle: identification of chemically diverse chk1 inhibitors by2 receptor-based virtual screening
85	d1xjda	Alignment	not modelled	100.0	25	Fold: Protein kinase-like (PK-like) Superfamily: Protein kinase-like (PK-like) Family: Protein kinases, catalytic subunit
86	c1xjdA	Alignment	not modelled	100.0	25	PDB header: transferase Chain: A: PDB Molecule: protein kinase c, theta type; PDBTitle: crystal structure of pkc-theta complexed with staurosporine2 at 2a resolution
87	d1o6ya	Alignment	not modelled	100.0	23	Fold: Protein kinase-like (PK-like) Superfamily: Protein kinase-like (PK-like) Family: Protein kinases, catalytic subunit
88	c2a27B	Alignment	not modelled	100.0	22	PDB header: transferase Chain: B: PDB Molecule: death-associated protein kinase 2; PDBTitle: human drp-1 kinase, w305s s308a d40 mutant, crystal form with 82 monomers in the asymmetric unit
89	c3v5qB	Alignment	not modelled	100.0	33	PDB header: transferase/transferase inhibitor Chain: B: PDB Molecule: nt-3 growth factor receptor; PDBTitle: discovery of a selective trk inhibitor with efficacy in rodent cancer2 tumor models
90	d1nvra	Alignment	not modelled	100.0	22	Fold: Protein kinase-like (PK-like) Superfamily: Protein kinase-like (PK-like) Family: Protein kinases, catalytic subunit
91	c2wtkB	Alignment	not modelled	100.0	18	PDB header: transferase/metal-binding protein Chain: B: PDB Molecule: ste20-related kinase adapter protein alpha; PDBTitle: structure of the heterotrimeric lkb1-stradalphamo25alpha2 complex
92	c2zv2A	Alignment	not modelled	100.0	21	PDB header: transferase/transferase inhibitor Chain: A: PDB Molecule: calcium/calmodulin-dependent protein kinase kinase 2; PDBTitle: crystal structure of human calcium/calmodulin-dependent protein kinase2 kinase 2, beta, camkk2 kinase domain in complex with sto-609
93	c3sxaA	Alignment	not modelled	100.0	37	PDB header: transferase/transferase inhibitor Chain: A: PDB Molecule: cytoplasmic tyrosine-protein kinase bmx; PDBTitle: crystal structure of bmx non-receptor tyrosine kinase complex with2 dasatinib
94	c2wqmA	Alignment	not modelled	100.0	22	PDB header: transferase Chain: A: PDB Molecule: serine/threonine-protein kinase nek7; PDBTitle: structure of apo human nek7
95	c2bdwB	Alignment	not modelled	100.0	22	PDB header: transferase Chain: B: PDB Molecule: hypothetical protein k11e8.1d; PDBTitle: crystal structure of the auto-inhibited kinase domain of2 calcium/calmodulin activated kinase ii
96	c2vz6A	Alignment	not modelled	100.0	20	PDB header: transferase Chain: A: PDB Molecule: calcium calmodulin dependent protein kinase type ii alpha PDBTitle: structure of human calcium calmodulin dependent protein2 kinase type ii alpha (camk2a) in complex with indirubin3 e804
97	d1xkka	Alignment	not modelled	100.0	42	Fold: Protein kinase-like (PK-like) Superfamily: Protein kinase-like (PK-like) Family: Protein kinases, catalytic subunit
98	c1xkka	Alignment	not modelled	100.0	42	PDB header: transferase Chain: A: PDB Molecule: epidermal growth factor receptor; PDBTitle: egfr kinase domain complexed with a quinazoline inhibitor-2 gw572016
99	c3ps5A	Alignment	not modelled	100.0	26	PDB header: hydrolase, signaling protein Chain: A: PDB Molecule: tyrosine-protein phosphatase non-receptor type 6; PDBTitle: crystal structure of the full-length human protein tyrosine2 phosphatase shp-1
100	c2x4fA	Alignment	not modelled	100.0	22	PDB header: transferase Chain: A: PDB Molecule: myosin light chain kinase family member 4; PDBTitle: the crystal structure of the human myosin light chain2 kinase loc340156.
101	c2ya9A	Alignment	not modelled	100.0	23	PDB header: transferase Chain: A: PDB Molecule: death-associated protein kinase 2; PDBTitle: crystal structure of the autoinhibited form of mouse dapk2
102	c2vd5A	Alignment	not modelled	100.0	22	PDB header: transferase Chain: A: PDB Molecule: dmpk protein; PDBTitle: structure of human myotonic dystrophy protein kinase in2 complex with the bisindolylmaleide inhibitor bim viii

103	c2b3oA	Alignment	not modelled	100.0	26	PDB header: hydrolase Chain: A: PDB Molecule: tyrosine-protein phosphatase, non-receptor type PDBTitle: crystal structure of human tyrosine phosphatase shp-1
104	c2chlA	Alignment	not modelled	100.0	18	PDB header: transferase Chain: A: PDB Molecule: casein kinase i isoform gamma-3; PDBTitle: structure of casein kinase 1 gamma 3
105	c2r7bA	Alignment	not modelled	100.0	23	PDB header: signaling protein, transferase Chain: A: PDB Molecule: phosphoinositide-dependent protein kinase 1; PDBTitle: crystal structure of the phosphoinositide-dependent kinase-2 1 (pdk-1)catalytic domain bound to a dibenzonaphthyridine3 inhibitor
106	c3comB	Alignment	not modelled	100.0	26	PDB header: transferase Chain: B: PDB Molecule: serine/threonine-protein kinase 4; PDBTitle: crystal structure of mst1 kinase
107	d1uu3a	Alignment	not modelled	100.0	23	Fold: Protein kinase-like (PK-like) Superfamily: Protein kinase-like (PK-like) Family: Protein kinases, catalytic subunit
108	c2r5tA	Alignment	not modelled	100.0	22	PDB header: transferase Chain: A: PDB Molecule: serine/threonine-protein kinase sgk1; PDBTitle: crystal structure of inactive serum and glucocorticoid-2 regulated kinase 1 in complex with amp-pnp
109	c1zrzA	Alignment	not modelled	100.0	21	PDB header: transferase Chain: A: PDB Molecule: protein kinase c, iota; PDBTitle: crystal structure of the catalytic domain of atypical2 protein kinase c-iota
110	d1rjba	Alignment	not modelled	100.0	36	Fold: Protein kinase-like (PK-like) Superfamily: Protein kinase-like (PK-like) Family: Protein kinases, catalytic subunit
111	d1koba	Alignment	not modelled	100.0	22	Fold: Protein kinase-like (PK-like) Superfamily: Protein kinase-like (PK-like) Family: Protein kinases, catalytic subunit
112	d1o6la	Alignment	not modelled	100.0	23	Fold: Protein kinase-like (PK-like) Superfamily: Protein kinase-like (PK-like) Family: Protein kinases, catalytic subunit
113	c1kobB	Alignment	not modelled	100.0	22	PDB header: kinase Chain: B: PDB Molecule: twitchin; PDBTitle: twitchin kinase fragment (aplysia), autoregulated protein2 kinase domain
114	c3brbB	Alignment	not modelled	100.0	37	PDB header: transferase Chain: B: PDB Molecule: proto-oncogene tyrosine-protein kinase mer; PDBTitle: crystal structure of catalytic domain of the proto-oncogene tyrosine-2 protein kinase mer in complex with adp
115	c2y94A	Alignment	not modelled	100.0	25	PDB header: transferase Chain: A: PDB Molecule: 5'-amp-activated protein kinase catalytic subunit alpha-1; PDBTitle: structure of an active form of mammalian ampk
116	d1koaa2	Alignment	not modelled	100.0	22	Fold: Protein kinase-like (PK-like) Superfamily: Protein kinase-like (PK-like) Family: Protein kinases, catalytic subunit
117	c2h6dA	Alignment	not modelled	100.0	26	PDB header: signaling protein,transferase Chain: A: PDB Molecule: 5'-amp-activated protein kinase catalytic subunit PDBTitle: protein kinase domain of the human 5'-amp-activated protein2 kinase catalytic subunit alpha-2 (ampk alpha-2 chain)
118	d1fota	Alignment	not modelled	100.0	25	Fold: Protein kinase-like (PK-like) Superfamily: Protein kinase-like (PK-like) Family: Protein kinases, catalytic subunit
119	c2c47D	Alignment	not modelled	100.0	18	PDB header: transferase Chain: D: PDB Molecule: casein kinase 1 gamma 2 isoform; PDBTitle: structure of casein kinase 1 gamma 2
120	c3kl8C	Alignment	not modelled	100.0	21	PDB header: transferase/ transferase inhibitor Chain: C: PDB Molecule: calcium/calmodulin dependent protein kinase ii; PDBTitle: camkiintide inhibitor complex