







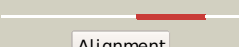
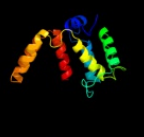















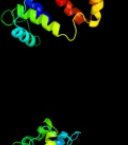
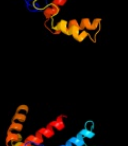
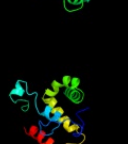


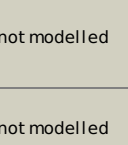


Phyre2

Email	l.a.kelley@imperial.ac.uk
Description	Q961S1
Date	Wed Feb 13 11:30:56 GMT 2013
Unique Job ID	044af2714b9ff5d5

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c1xa6A_	 Alignment		100.0	46	PDB header: signaling protein Chain: A: PDB Molecule: beta2-chimaerin; PDBTitle: crystal structure of the human beta2-chimaerin
2	d1xa6a1	 Alignment		100.0	46	Fold: GTPase activation domain, GAP Superfamily: GTPase activation domain, GAP Family: BCR-homology GTPase activation domain (BH-domain)
3	c3byiA_	 Alignment		100.0	28	PDB header: signaling protein Chain: A: PDB Molecule: rho gtpase activating protein 15; PDBTitle: crystal structure of human rho gtpase activating protein 15 (arhgap15)
4	c3kuqA_	 Alignment		100.0	25	PDB header: hydrolase activator Chain: A: PDB Molecule: rho gtpase-activating protein 7; PDBTitle: crystal structure of the dlc1 rhogap domain
5	c3iugA_	 Alignment		100.0	31	PDB header: splicing Chain: A: PDB Molecule: rho/cdc42/rac gtpase-activating protein rics; PDBTitle: crystal structure of the rhogap domain of rics
6	c2ee5A_	 Alignment		100.0	30	PDB header: hydrolase Chain: A: PDB Molecule: rho gtpase activating protein 5 variant; PDBTitle: solution structure of the n-terminus extended rhogap2 domain from human rho gtpase activating protein 5 variant
7	c3fk2B_	 Alignment		100.0	32	PDB header: signaling protein, hydrolase activator Chain: B: PDB Molecule: glucocorticoid receptor dna-binding factor 1; PDBTitle: crystal structure of the rhogap domain of human2 glucocorticoid receptor dna-binding factor 1
8	c3qisA_	 Alignment		100.0	20	PDB header: hydrolase/protein binding Chain: A: PDB Molecule: inositol polyphosphate 5-phosphatase ocr1-1; PDBTitle: recognition of the f&h motif by the lowe syndrome protein ocr1
9	d1bx4a_	 Alignment		100.0	24	Fold: GTPase activation domain, GAP Superfamily: GTPase activation domain, GAP Family: BCR-homology GTPase activation domain (BH-domain)
10	c2ngrB_	 Alignment		100.0	22	PDB header: hydrolase Chain: B: PDB Molecule: protein (gtpase activating protein (rhg)); PDBTitle: transition state complex for gtp hydrolysis by cdc42:2 comparisons of the high resolution structures for cdc423 bound to the active and catalytically compromised forms of4 the cdc42-gap.
11	c3msxB_	 Alignment		100.0	24	PDB header: protein binding Chain: B: PDB Molecule: rho gtpase-activating protein 20; PDBTitle: crystal structure of rhoa.gdp.mgf3 in complex with gap domain of2 arhgap20

12	c2ovjA_	Alignment		100.0	32	PDB header: signaling protein Chain: A: PDB Molecule: rac gtpase-activating protein 1; PDBTitle: the crystal structure of the human rac gtpase activating protein 12 (racgap1) mgcracgap.
13	c2qv2A_	Alignment		100.0	23	PDB header: hydrolase Chain: A: PDB Molecule: inositol polyphosphate 5-phosphatase ocr1-1; PDBTitle: a role of the lowe syndrome protein ocr1 in early steps of2 the endocytic pathway
14	d1f7ca_	Alignment		100.0	28	Fold: GTPase activation domain, GAP Superfamily: GTPase activation domain, GAP Family: BCR-homology GTPase activation domain (BH-domain)
15	c1f7cA_	Alignment		100.0	28	PDB header: signaling protein Chain: A: PDB Molecule: rhogap protein; PDBTitle: crystal structure of the bh domain from graf, the gtpase2 regulator associated with focal adhesion kinase
16	d1pbwa_	Alignment		99.9	25	Fold: GTPase activation domain, GAP Superfamily: GTPase activation domain, GAP Family: BCR-homology GTPase activation domain (BH-domain)
17	c1pbwB_	Alignment		99.9	24	PDB header: phosphotransferase Chain: B: PDB Molecule: phosphatidylinositol 3-kinase; PDBTitle: structure of bcr-homology (bh) domain
18	c3eapD_	Alignment		99.9	23	PDB header: hydrolase activator Chain: D: PDB Molecule: rho gtpase-activating protein 11a; PDBTitle: crystal structure of the rhogap domain of arhgap11a
19	d1xa6a2	Alignment		99.9	38	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
20	c2xs6A_	Alignment		99.9	26	PDB header: transferase Chain: A: PDB Molecule: phosphatidylinositol 3-kinase regulatory subunit beta; PDBTitle: crystal structure of the rhogap domain of human pik3r2
21	c3hizB_	Alignment	not modelled	99.5	27	PDB header: transferase/oncoprotein Chain: B: PDB Molecule: phosphatidylinositol 3-kinase regulatory subunit PDBTitle: crystal structure of p110alpha h1047r mutant in complex with2 nish2 of p85alpha
22	c2eo6A_	Alignment	not modelled	99.4	26	PDB header: signaling protein Chain: A: PDB Molecule: b-cell linker protein; PDBTitle: solution structure of the sh2 domain from mouse b-cell12 linker protein blk
23	c2c9wA_	Alignment	not modelled	99.4	26	PDB header: transcription regulation Chain: A: PDB Molecule: suppressor of cytokine signaling 2; PDBTitle: crystal structure of socs-2 in complex with elongin-b and2 elongin-c at 1.9a resolution
24	c2oq1A_	Alignment	not modelled	99.4	26	PDB header: transferase Chain: A: PDB Molecule: tyrosine-protein kinase zap-70; PDBTitle: tandem sh2 domains of zap-70 with 19-mer zeta1 peptide
25	c2y3aB_	Alignment	not modelled	99.4	23	PDB header: transferase Chain: B: PDB Molecule: phosphatidylinositol 3-kinase regulatory subunit beta; PDBTitle: crystal structure of p110beta in complex with icsh2 of p85beta and2 the drug gdc-0941
26	d2oq1a1	Alignment	not modelled	99.3	26	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
27	c2ozoA_	Alignment	not modelled	99.3	25	PDB header: transferase Chain: A: PDB Molecule: tyrosine-protein kinase zap-70; PDBTitle: autoinhibited intact human zap-70
28	c2shpA_	Alignment	not modelled	99.3	31	PDB header: tyrosine phosphatase Chain: A: PDB Molecule: shp-2; PDBTitle: tyrosine phosphatase shp-2

29	c2fo0A_	Alignment	not modelled	99.3	34	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
30	c2lqnA_	Alignment	not modelled	99.3	29	PDB header: signaling protein Chain: A: PDB Molecule: crk-like protein; PDBTitle: solution structure of crkl
31	c4fl2A_	Alignment	not modelled	99.3	24	PDB header: transferase Chain: A: PDB Molecule: tyrosine-protein kinase syk; PDBTitle: structural and biophysical characterization of the syk activation2 switch
32	c2vifA_	Alignment	not modelled	99.3	27	PDB header: signaling protein Chain: A: PDB Molecule: suppressor of cytokine signalling 6; PDBTitle: crystal structure of socs6 sh2 domain in complex with a c-kit2 phosphopeptide
33	c2crhA_	Alignment	not modelled	99.3	24	PDB header: signaling protein Chain: A: PDB Molecule: vav proto-oncogene; PDBTitle: solution structure of the sh2 domain of human proto-2 oncogene protein vav1
34	d2eyva1	Alignment	not modelled	99.3	35	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
35	d1fhsa_	Alignment	not modelled	99.3	24	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
36	d1a81a1	Alignment	not modelled	99.3	24	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
37	d1r1qa_	Alignment	not modelled	99.3	21	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
38	d2izva2	Alignment	not modelled	99.3	21	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
39	c2izvA_	Alignment	not modelled	99.3	21	PDB header: transcription Chain: A: PDB Molecule: suppressor of cytokine signaling 4; PDBTitle: crystal structure of socs-4 in complex with elongin-b and2 elongin-c at 2.55a resolution
40	d1k9aa2	Alignment	not modelled	99.3	25	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
41	d1a81e1	Alignment	not modelled	99.3	24	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
42	c3gqiB_	Alignment	not modelled	99.3	32	PDB header: transferase/transferase inhibitor Chain: B: PDB Molecule: phospholipase c-gamma-1; PDBTitle: crystal structure of activated receptor tyrosine kinase in complex2 with substrates
43	c2dlzA_	Alignment	not modelled	99.3	21	PDB header: signaling protein Chain: A: PDB Molecule: protein vav-2; PDBTitle: solution structure of the sh2 domain of human protein vav-2
44	c1oplA_	Alignment	not modelled	99.3	34	PDB header: transferase Chain: A: PDB Molecule: proto-oncogene tyrosine-protein kinase; PDBTitle: structural basis for the auto-inhibition of c-abl tyrosine2 kinase
45	c2gsbA_	Alignment	not modelled	99.3	20	PDB header: signaling protein Chain: A: PDB Molecule: ras gtpase-activating protein 1; PDBTitle: solution structure of the second sh2 domain of human ras2 gtpase-activating protein 1
46	d2c9wa2	Alignment	not modelled	99.2	26	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
47	c2dlyA_	Alignment	not modelled	99.2	21	PDB header: transferase Chain: A: PDB Molecule: fyn-related kinase; PDBTitle: solution structure of the sh2 domain of murine fyn-related2 kinase
48	c2b3oA_	Alignment	not modelled	99.2	25	PDB header: hydrolase Chain: A: PDB Molecule: tyrosine-protein phosphatase, non-receptor type PDBTitle: crystal structure of human tyrosine phosphatase shp-1
49	c3ps5A_	Alignment	not modelled	99.2	25	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
50	d1rjaa_	Alignment	not modelled	99.2	22	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
51	c2eo3A_	Alignment	not modelled	99.2	29	PDB header: signaling protein Chain: A: PDB Molecule: crk-like protein; PDBTitle: solution structure of the sh2 domain from human crk-like2 protein
52	c2hnhA_	Alignment	not modelled	99.2	19	PDB header: cytokine regulator Chain: A: PDB Molecule: suppressor of cytokine signaling 3; PDBTitle: crystal structure of socs3 in complex with gp130(p Tyr757)2 phosphopeptide.
53	c1k9aB_	Alignment	not modelled	99.2	25	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
54	d1jwoa_	Alignment	not modelled	99.2	32	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain

55	d2cs0a1	Alignment	not modelled	99.2	23	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
56	c3pfgA	Alignment	not modelled	99.2	37	PDB header: transferase Chain: A: PDB Molecule: protein kinase c beta type; PDBTitle: crystal structure and allosteric activation of protein kinase c beta2 ii
57	c2hdxB	Alignment	not modelled	99.2	28	PDB header: signaling protein Chain: B: PDB Molecule: sh2-b ph domain containing signaling mediator 1 PDBTitle: crystal structure of the src homology-2 domain of sh2-b in2 complex with jak2 tyr813 phosphopeptide
58	d2oq1a2	Alignment	not modelled	99.2	32	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
59	d1nrva	Alignment	not modelled	99.2	18	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
60	d1ayaa	Alignment	not modelled	99.2	32	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
61	d1a81e2	Alignment	not modelled	99.2	27	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
62	c2ysxA	Alignment	not modelled	99.2	22	PDB header: signaling protein Chain: A: PDB Molecule: signaling inositol polyphosphate phosphatase PDBTitle: solution structure of the human ship sh2 domain
63	d3c7ia1	Alignment	not modelled	99.2	24	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
64	c2eobA	Alignment	not modelled	99.2	22	PDB header: hydrolase Chain: A: PDB Molecule: 1-phosphatidylinositol-4,5-bisphosphate PDBTitle: solution structure of the second sh2 domain from rat plc2 gamma-2
65	c1ka6A	Alignment	not modelled	99.2	22	PDB header: immune system Chain: A: PDB Molecule: sh2 domain protein 1a; PDBTitle: sap/sh2d1a bound to peptide n-py
66	c2ci8A	Alignment	not modelled	99.2	24	PDB header: translation Chain: A: PDB Molecule: cytoplasmic protein nck1; PDBTitle: sh2 domain of human nck1 adaptor protein - uncomplexed
67	d1a81a2	Alignment	not modelled	99.2	25	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
68	c2lctA	Alignment	not modelled	99.2	29	PDB header: signaling protein Chain: A: PDB Molecule: proto-oncogene vav; PDBTitle: solution structure of the vav1 sh2 domain complexed with a syk-derived2 doubly phosphorylated peptide
69	d1csya	Alignment	not modelled	99.2	27	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
70	d1xa6a3	Alignment	not modelled	99.2	63	Fold: Cysteine-rich domain Superfamily: Cysteine-rich domain Family: Protein kinase cysteine-rich domain (cys2, phorbol-binding domain)
71	d1rpya	Alignment	not modelled	99.2	27	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
72	c2el8A	Alignment	not modelled	99.2	18	PDB header: signaling protein Chain: A: PDB Molecule: signal-transducing adaptor protein 2; PDBTitle: solution structure of the human stap2 sh2 domain
73	d2shpa2	Alignment	not modelled	99.2	31	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
74	c1rqgC	Alignment	not modelled	99.2	27	PDB header: transferase/signaling protein Chain: C: PDB Molecule: adaptor protein aps; PDBTitle: crystal structure of the insulin receptor kinase in complex2 with the sh2 domain of aps
75	d1opka2	Alignment	not modelled	99.2	34	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
76	c2ablA	Alignment	not modelled	99.2	34	PDB header: transferase Chain: A: PDB Molecule: abl tyrosine kinase; PDBTitle: sh3-sh2 domain fragment of human bcr-abl tyrosine kinase
77	c1a81E	Alignment	not modelled	99.2	23	PDB header: complex (transferase/peptide) Chain: E: PDB Molecule: syk kinase; PDBTitle: crystal structure of the tandem sh2 domain of the syk kinase bound to2 a dually tyrosine-phosphorylated itam
78	d1jyra	Alignment	not modelled	99.2	24	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
79	c2augB	Alignment	not modelled	99.2	21	PDB header: signaling protein Chain: B: PDB Molecule: growth factor receptor-bound protein 14; PDBTitle: crystal structure of the grb14 sh2 domain
80	d1i3za	Alignment	not modelled	99.2	24	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
81	d2shpa3	Alignment	not modelled	99.2	31	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain

82	c1x6cA	Alignment	not modelled	99.1	33	PDB header: signaling protein Chain: A: PDB Molecule: tyrosine-protein phosphatase, non-receptor type PDBTitle: solution structures of the sh2 domain of human protein-2 tyrosine phosphatase shp-1
83	d1d4ta	Alignment	not modelled	99.1	22	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
84	d1lkka	Alignment	not modelled	99.1	28	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
85	d1cwea	Alignment	not modelled	99.1	23	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
86	d1pica	Alignment	not modelled	99.1	25	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
87	d1blja	Alignment	not modelled	99.1	26	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
88	d1qcfa2	Alignment	not modelled	99.1	22	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
89	d1f2fa	Alignment	not modelled	99.1	28	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
90	c1y57A	Alignment	not modelled	99.1	32	PDB header: transferase Chain: A: PDB Molecule: proto-oncogene tyrosine-protein kinase src; PDBTitle: structure of unphosphorylated c-src in complex with an inhibitor
91	c2knoA	Alignment	not modelled	99.1	22	PDB header: hydrolase Chain: A: PDB Molecule: tensin-like c1 domain-containing phosphatase; PDBTitle: nmr solution structure of sh2 domain of the human tensin like c12 domain containing phosphatase (tenc1)
92	c2eyzA	Alignment	not modelled	99.1	36	PDB header: signaling protein Chain: A: PDB Molecule: v-crk sarcoma virus ct10 oncogene homolog PDBTitle: ct10-regulated kinase isoform ii
93	d2qmsa1	Alignment	not modelled	99.1	25	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
94	c1x27F	Alignment	not modelled	99.1	22	PDB header: signaling protein Chain: F: PDB Molecule: proto-oncogene tyrosine-protein kinase lck; PDBTitle: crystal structure of lck sh2-sh3 with sh2 binding site of p130cas
95	c2dviA	Alignment	not modelled	99.1	33	PDB header: signaling protein Chain: A: PDB Molecule: v-crk sarcoma virus ct10 oncogene homolog, PDBTitle: phosphorylated crk-ii
96	c4b6dA	Alignment	not modelled	99.0	29	PDB header: signaling protein Chain: A: PDB Molecule: rac gtpase-activating protein 1; PDBTitle: structure of the atypical c1 domain of mgcracgap
97	d1qada	Alignment	not modelled	99.0	26	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
98	c2h8hA	Alignment	not modelled	99.0	32	PDB header: transferase Chain: A: PDB Molecule: proto-oncogene tyrosine-protein kinase src; PDBTitle: src kinase in complex with a quinazoline inhibitor
99	d1mila	Alignment	not modelled	99.0	33	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
100	d1luia	Alignment	not modelled	99.0	25	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
101	c2kk6A	Alignment	not modelled	99.0	28	PDB header: transferase Chain: A: PDB Molecule: proto-oncogene tyrosine-protein kinase fer; PDBTitle: solution structure of sh2 domain of proto-oncogene tyrosine-2 protein kinase fer from homo sapiens, northeast structural3 genomics consortium (nesg) target hr3461d
102	c2e73A	Alignment	not modelled	99.0	32	PDB header: transferase Chain: A: PDB Molecule: protein kinase c gamma type; PDBTitle: solution structure of the phorbol esters/diacylglycerol2 binding domain of protein kinase c gamma
103	c3gxxB	Alignment	not modelled	99.0	16	PDB header: transcription Chain: B: PDB Molecule: transcription elongation factor spt6; PDBTitle: structure of the sh2 domain of the candida glabrata2 transcription elongation factor spt6, crystal form b
104	c2eliA	Alignment	not modelled	99.0	30	PDB header: transferase Chain: A: PDB Molecule: protein kinase c alpha type; PDBTitle: solution structure of the second phorbol2 esters/diacylglycerol binding domain of human protein3 kinase c alpha type
105	d1bkla	Alignment	not modelled	99.0	29	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
106	c2dcrA	Alignment	not modelled	99.0	23	PDB header: transferase Chain: A: PDB Molecule: proto-oncogene tyrosine-protein kinase fes/fps; PDBTitle: fully automated solution structure determination of the

						fes2 sh2 domain
107	d1g83a2	Alignment	not modelled	99.0	32	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
108	d1fu6a	Alignment	not modelled	99.0	27	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
109	c3nhnA	Alignment	not modelled	99.0	23	PDB header: transferase Chain: A: PDB Molecule: tyrosine-protein kinase hck; PDBTitle: crystal structure of the src-family kinase hck sh3-sh2-linker2 regulatory region
110	c3mazA	Alignment	not modelled	99.0	17	PDB header: signaling protein Chain: A: PDB Molecule: signal-transducing adaptor protein 1; PDBTitle: crystal structure of the human brdg1/stap-1 sh2 domain in complex with2 the ntal ptyr136 peptide
111	c2c0iA	Alignment	not modelled	99.0	29	PDB header: transferase Chain: A: PDB Molecule: tyrosine-protein kinase hck; PDBTitle: src family kinase hck with bound inhibitor a-420983
112	c2rowA	Alignment	not modelled	99.0	21	PDB header: transferase Chain: A: PDB Molecule: rho-associated protein kinase 2; PDBTitle: the c1 domain of rock ii
113	d1tbna	Alignment	not modelled	99.0	31	Fold: Cysteine-rich domain Superfamily: Cysteine-rich domain Family: Protein kinase cysteine-rich domain (cys2, phorbol-binding domain)
114	d2fcia1	Alignment	not modelled	99.0	23	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
115	c2ennA	Alignment	not modelled	99.0	26	PDB header: transferase Chain: A: PDB Molecule: protein kinase c theta type; PDBTitle: solution structure of the first c1 domain from human2 protein kinase c theta
116	c2ge9A	Alignment	not modelled	99.0	24	PDB header: transferase Chain: A: PDB Molecule: tyrosine-protein kinase btk; PDBTitle: solution structures of the sh2 domain of bruton's tyrosine2 kinase
117	c2eyyA	Alignment	not modelled	99.0	33	PDB header: signaling protein Chain: A: PDB Molecule: v-crk sarcoma virus ct10 oncogene homolog PDBTitle: ct10-regulated kinase isoform i
118	d1o48a	Alignment	not modelled	99.0	29	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
119	c2db6A	Alignment	not modelled	99.0	30	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: sh3 and cysteine rich domain 3; PDBTitle: solution structure of rsgi ruh-051, a c1 domain of stac32 from human cdna
120	c2enzA	Alignment	not modelled	98.9	38	PDB header: transferase Chain: A: PDB Molecule: protein kinase c theta type; PDBTitle: solution structure of the second c1 domain from human2 protein kinase c theta