



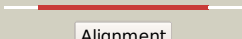

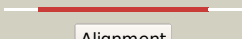

















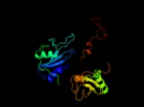








Phyre2

Email	l.a.kelley@imperial.ac.uk
Description	Q22070
Date	Sat Apr 13 12:57:32 BST 2013
Unique Job ID	810548c15e619017

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c3ohmB_	 Alignment		100.0	37	PDB header: signaling protein / hydrolase Chain: B: PDB Molecule: 1-phosphatidylinositol-4,5-bisphosphate phosphodiesterase PDBTitle: crystal structure of activated g alpha q bound to its effector2 phospholipase c beta 3
2	c3qr0A_	 Alignment		100.0	33	PDB header: hydrolase Chain: A: PDB Molecule: phospholipase c-beta (plc-beta); PDBTitle: crystal structure of s. officinalis plc21
3	c2fjuB_	 Alignment		100.0	37	PDB header: signaling protein,apoptosis/hydrolase Chain: B: PDB Molecule: 1-phosphatidylinositol-4,5-bisphosphate PDBTitle: activated rac1 bound to its effector phospholipase c beta 2
4	c1djiB_	 Alignment		100.0	46	PDB header: lipid degradation Chain: B: PDB Molecule: phosphoinositide-specific phospholipase c, PDBTitle: phosphoinositide-specific phospholipase c-delta1 from rat2 complexed with inositol-2,4,5-trisphosphate
5	d2zkmx4	 Alignment		100.0	54	Fold: TIM beta/alpha-barrel Superfamily: PLC-like phosphodiesterases Family: Mammalian PLC
6	d1qasa3	 Alignment		100.0	59	Fold: TIM beta/alpha-barrel Superfamily: PLC-like phosphodiesterases Family: Mammalian PLC
7	c3gqiB_	 Alignment		100.0	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
8	c2b3oA_	 Alignment		100.0	24	PDB header: hydrolase Chain: A: PDB Molecule: tyrosine-protein phosphatase, non-receptor type PDBTitle: crystal structure of human tyrosine phosphatase shp-1
9	c3ps5A_	 Alignment		100.0	29	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
10	d2zkmx2	 Alignment		100.0	27	Fold: C2 domain-like Superfamily: C2 domain (Calcium/lipid-binding domain, CaLB) Family: PLC-like (P variant)
11	c2shpA_	 Alignment		100.0	29	PDB header: tyrosine phosphatase Chain: A: PDB Molecule: shp-2; PDBTitle: tyrosine phosphatase shp-2

12	d1qasa2	Alignment		100.0	38	Fold: C2 domain-like Superfamily: C2 domain (Calcium/lipid-binding domain, CaLB) Family: PLC-like (P variant)
13	c2lqnA	Alignment		99.9	20	PDB header: signaling protein Chain: A; PDB Molecule: crk-like protein; PDBTitle: solution structure of crkl
14	c4fl2A	Alignment		99.9	27	PDB header: transferase Chain: A; PDB Molecule: tyrosine-protein kinase syk; PDBTitle: structural and biophysical characterization of the syk activation2 switch
15	c2oq1A	Alignment		99.9	30	PDB header: transferase Chain: A; PDB Molecule: tyrosine-protein kinase zap-70; PDBTitle: tandem sh2 domains of zap-70 with 19-mer zeta1 peptide
16	c2eyzA	Alignment		99.9	17	PDB header: signaling protein Chain: A; PDB Molecule: v-crk sarcoma virus ct10 oncogene homolog PDBTitle: ct10-regulated kinase isoform ii
17	c2ozoA	Alignment		99.9	28	PDB header: transferase Chain: A; PDB Molecule: tyrosine-protein kinase zap-70; PDBTitle: autoinhibited intact human zap-70
18	c1a81E	Alignment		99.9	26	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
19	d2zkmx1	Alignment		99.8	17	Fold: EF Hand-like Superfamily: EF-hand Family: EF-hand modules in multidomain proteins
20	d1qasa1	Alignment		99.8	20	Fold: EF Hand-like Superfamily: EF-hand Family: EF-hand modules in multidomain proteins
21	d2zkmx3	Alignment	not modelled	99.8	18	Fold: PH domain-like barrel Superfamily: PH domain-like Family: Pleckstrin-homology domain (PH domain)
22	c2eyyA	Alignment	not modelled	99.8	23	PDB header: signaling protein Chain: A; PDB Molecule: v-crk sarcoma virus ct10 oncogene homolog PDBTitle: ct10-regulated kinase isoform i
23	d1djxb1	Alignment	not modelled	99.8	19	Fold: EF Hand-like Superfamily: EF-hand Family: EF-hand modules in multidomain proteins
24	c3h4wA	Alignment	not modelled	99.8	23	PDB header: hydrolase Chain: A; PDB Molecule: phosphatidylinositol-specific phospholipase c1; PDBTitle: structure of a ca+2 dependent phosphatidylinositol-specific2 phospholipase c (pi-plc) enzyme from streptomyces antibioticus
25	c2dvjA	Alignment	not modelled	99.7	24	PDB header: signaling protein Chain: A; PDB Molecule: v-crk sarcoma virus ct10 oncogene homolog, PDBTitle: phosphorylated crk-ii
26	c3qwxX	Alignment	not modelled	99.7	22	PDB header: signaling protein Chain: X; PDB Molecule: cell death abnormality protein 2; PDBTitle: ced-2 1-174
27	c3or8A	Alignment	not modelled	99.6	12	PDB header: transcription Chain: A; PDB Molecule: transcription elongation factor spt6; PDBTitle: a tandem sh2 domain in transcription elongation factor spt6
28	c3qwyA	Alignment	not modelled	99.6	22	PDB header: signaling protein Chain: A; PDB Molecule: cell death abnormality protein 2; PDBTitle: ced-2

29	c2fjIA	Alignment	not modelled	99.6	32	PDB header: hydrolase Chain: A: PDB Molecule: 1-phosphatidylinositol-4,5-bisphosphate PDBTitle: solution structure of the split ph domain in phospholipase2 c-gamma1
30	c2xp1A	Alignment	not modelled	99.6	20	PDB header: transcription Chain: A: PDB Molecule: spt6; PDBTitle: structure of the tandem sh2 domains from antonospora locustae2 transcription elongation factor spt6
31	d1maia	Alignment	not modelled	99.6	17	Fold: PH domain-like barrel Superfamily: PH domain-like Family: Pleckstrin-homology domain (PH domain)
32	c2eobA	Alignment	not modelled	99.6	33	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
33	d2nq3a1	Alignment	not modelled	99.5	21	Fold: C2 domain-like Superfamily: C2 domain (Calcium/lipid-binding domain, CaLB) Family: PLC-like (P variant)
34	c2nq3A	Alignment	not modelled	99.5	21	PDB header: ligase Chain: A: PDB Molecule: itchy homolog e3 ubiquitin protein ligase; PDBTitle: crystal structure of the c2 domain of human itchy homolog2 e3 ubiquitin protein ligase
35	c3m7fB	Alignment	not modelled	99.5	23	PDB header: signaling protein/ligase Chain: B: PDB Molecule: e3 ubiquitin-protein ligase nedd4; PDBTitle: crystal structure of the nedd4 c2/grb10 sh2 complex
36	d2r83a1	Alignment	not modelled	99.5	27	Fold: C2 domain-like Superfamily: C2 domain (Calcium/lipid-binding domain, CaLB) Family: Synaptotagmin-like (S variant)
37	d1gmia	Alignment	not modelled	99.5	17	Fold: C2 domain-like Superfamily: C2 domain (Calcium/lipid-binding domain, CaLB) Family: PLC-like (P variant)
38	c2chdA	Alignment	not modelled	99.5	27	PDB header: protein transport Chain: A: PDB Molecule: rabphilin-3a; PDBTitle: crystal structure of the c2a domain of rabphilin-3a
39	c3nsjA	Alignment	not modelled	99.5	20	PDB header: immune system Chain: A: PDB Molecule: perforin-1; PDBTitle: the x-ray crystal structure of lymphocyte perforin
40	c2q3xA	Alignment	not modelled	99.5	19	PDB header: transport protein Chain: A: PDB Molecule: regulating synaptic membrane exocytosis protein 1; PDBTitle: the rim1alpha c2b domain
41	c3l9bA	Alignment	not modelled	99.5	17	PDB header: membrane protein Chain: A: PDB Molecule: otoflerin; PDBTitle: crystal structure of rat otoferlin c2a
42	d1rlwa	Alignment	not modelled	99.5	24	Fold: C2 domain-like Superfamily: C2 domain (Calcium/lipid-binding domain, CaLB) Family: PLC-like (P variant)
43	d1ugka	Alignment	not modelled	99.4	21	Fold: C2 domain-like Superfamily: C2 domain (Calcium/lipid-binding domain, CaLB) Family: Synaptotagmin-like (S variant)
44	c2dmhA	Alignment	not modelled	99.4	19	PDB header: lipid binding protein Chain: A: PDB Molecule: myoferlin; PDBTitle: solution structure of the first c2 domain of human myoferlin
45	c2gsbA	Alignment	not modelled	99.4	23	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	c2hdxB	Alignment	not modelled	99.4	22	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
47	d1dsya	Alignment	not modelled	99.4	30	Fold: C2 domain-like Superfamily: C2 domain (Calcium/lipid-binding domain, CaLB) Family: Synaptotagmin-like (S variant)
48	c2vszA	Alignment	not modelled	99.4	17	PDB header: apoptosis Chain: A: PDB Molecule: engulfment and cell motility protein 1; PDBTitle: crystal structure of the elmo1 ph domain
49	c3fbkB	Alignment	not modelled	99.4	22	PDB header: signaling protein Chain: B: PDB Molecule: regulator of g-protein signaling 3; PDBTitle: crystal structure of the c2 domain of the human regulator2 of g-protein signaling 3 isoform 6 (rgp3), northeast3 structural genomics consortium target hr5550a
50	d1v27a	Alignment	not modelled	99.4	24	Fold: C2 domain-like Superfamily: C2 domain (Calcium/lipid-binding domain, CaLB) Family: Synaptotagmin-like (S variant)
51	c3kwtA	Alignment	not modelled	99.4	26	PDB header: metal binding protein Chain: A: PDB Molecule: munc13-1; PDBTitle: munc13-1 c2b-domain, calcium-free
52	c2fk9A	Alignment	not modelled	99.4	18	PDB header: transferase Chain: A: PDB Molecule: protein kinase c, eta type; PDBTitle: human protein kinase c, eta
53	c3hizB	Alignment	not modelled	99.4	26	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
54	c2z0uB	Alignment	not modelled	99.4	13	PDB header: lipid binding protein Chain: B: PDB Molecule: ww domain-containing protein 1; PDBTitle: crystal structure of c2 domain of kibra protein
						PDB header: hydrolase

55	c2dx0B_	Alignment	not modelled	99.3	36	Chain: B: PDB Molecule: phospholipase c, gamma 2; PDBTitle: crystal structure of the n-terminal sh2 domain of mouse2 phospholipase c-gamma 2
56	c2jqzA_	Alignment	not modelled	99.3	21	PDB header: ligase Chain: A: PDB Molecule: e3 ubiquitin-protein ligase smurf2; PDBTitle: solution structure of the c2 domain of human smurf2
57	d2fcia1	Alignment	not modelled	99.3	30	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
58	d1bdya_	Alignment	not modelled	99.3	16	Fold: C2 domain-like Superfamily: C2 domain (Calcium/lipid-binding domain, CaLB) Family: PLC-like (P variant)
59	d2izva2	Alignment	not modelled	99.3	19	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
60	c3jzyA_	Alignment	not modelled	99.3	30	PDB header: endocytosis Chain: A: PDB Molecule: intersectin 2; PDBTitle: crystal structure of human intersectin 2 c2 domain
61	d1a25a_	Alignment	not modelled	99.3	26	Fold: C2 domain-like Superfamily: C2 domain (Calcium/lipid-binding domain, CaLB) Family: Synaptotagmin-like (S variant)
62	d3c7ia1	Alignment	not modelled	99.3	27	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
63	c2crhA_	Alignment	not modelled	99.3	23	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
64	c1dqvA_	Alignment	not modelled	99.3	30	PDB header: endocytosis/exocytosis Chain: A: PDB Molecule: synaptotagmin iii; PDBTitle: crystal structure of synaptotagmin iii c2a/c2b
65	c2d8kA_	Alignment	not modelled	99.3	28	PDB header: endocytosis/exocytosis Chain: A: PDB Molecule: synaptotagmin vii; PDBTitle: solution structure of the first c2 domain of synaptotagmin2 vii
66	d1wfma_	Alignment	not modelled	99.3	16	Fold: C2 domain-like Superfamily: C2 domain (Calcium/lipid-binding domain, CaLB) Family: Synaptotagmin-like (S variant)
67	c2enpA_	Alignment	not modelled	99.3	26	PDB header: transport protein Chain: A: PDB Molecule: b/k protein; PDBTitle: solution structure of the first c2 domain from human b/k2 protein
68	d1rsya_	Alignment	not modelled	99.3	27	Fold: C2 domain-like Superfamily: C2 domain (Calcium/lipid-binding domain, CaLB) Family: Synaptotagmin-like (S variant)
69	c2y3aB_	Alignment	not modelled	99.3	30	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
70	c2eo6A_	Alignment	not modelled	99.2	27	PDB header: signaling protein Chain: A: PDB Molecule: b-cell linker protein; PDBTitle: solution structure of the sh2 domain from mouse b-cell2 linker protein blk
71	d2bwqa1	Alignment	not modelled	99.2	23	Fold: C2 domain-like Superfamily: C2 domain (Calcium/lipid-binding domain, CaLB) Family: Synaptotagmin-like (S variant)
72	c2dlza_	Alignment	not modelled	99.2	27	PDB header: signaling protein Chain: A: PDB Molecule: protein vav-2; PDBTitle: solution structure of the sh2 domain of human protein vav-2
73	d1a81e2	Alignment	not modelled	99.2	37	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
74	d2oq1a2	Alignment	not modelled	99.2	27	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
75	d2ep6a1	Alignment	not modelled	99.2	30	Fold: C2 domain-like Superfamily: C2 domain (Calcium/lipid-binding domain, CaLB) Family: PLC-like (P variant)
76	d2qmsa1	Alignment	not modelled	99.2	27	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
77	d2cjta1	Alignment	not modelled	99.2	24	Fold: C2 domain-like Superfamily: C2 domain (Calcium/lipid-binding domain, CaLB) Family: PLC-like (P variant)
78	c2nsgA_	Alignment	not modelled	99.2	22	PDB header: ligase Chain: A: PDB Molecule: e3 ubiquitin-protein ligase nedd4-like protein; PDBTitle: crystal structure of the c2 domain of the human e3 ubiquitin-protein2 ligase nedd4-like protein
79	d2cjsa1	Alignment	not modelled	99.2	26	Fold: C2 domain-like Superfamily: C2 domain (Calcium/lipid-binding domain, CaLB) Family: PLC-like (P variant)
80	c2r83B_	Alignment	not modelled	99.2	26	PDB header: endocytosis, exocytosis Chain: B: PDB Molecule: synaptotagmin-1; PDBTitle: crystal structure analysis of human synaptotagmin 1 c2a-c2b
81	d1a81a1	Alignment	not modelled	99.2	22	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain

82	d2shpa2	Alignment	not modelled	99.2	30	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
83	d1blja_	Alignment	not modelled	99.2	34	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
84	d2oq1a1	Alignment	not modelled	99.2	31	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
85	c2dlyA_	Alignment	not modelled	99.2	37	PDB header: transferase Chain: A: PDB Molecule: fyn-related kinase; PDBTitle: solution structure of the sh2 domain of murine fyn-related2 kinase
86	c2b3rA_	Alignment	not modelled	99.2	17	PDB header: transferase Chain: A: PDB Molecule: phosphatidylinositol-4-phosphate 3-kinase c2 domain- PDBTitle: crystal structure of the c2 domain of class ii phosphatidylinositide2 3-kinase c2
87	d1fhsa_	Alignment	not modelled	99.2	27	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
88	d2eyva1	Alignment	not modelled	99.2	30	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
89	c2dmgA_	Alignment	not modelled	99.2	22	PDB header: lipid binding protein Chain: A: PDB Molecule: kiaa1228 protein; PDBTitle: solution structure of the third c2 domain of kiaa12282 protein
90	d2cs0a1	Alignment	not modelled	99.2	26	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
91	c2augB_	Alignment	not modelled	99.2	28	PDB header: signaling protein Chain: B: PDB Molecule: growth factor receptor-bound protein 14; PDBTitle: crystal structure of the grb14 sh2 domain
92	c2eo3A_	Alignment	not modelled	99.2	30	PDB header: signaling protein Chain: A: PDB Molecule: crk-like protein; PDBTitle: solution structure of the sh2 domain from human crk-like2 protein
93	d1a81e1	Alignment	not modelled	99.2	25	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
94	d1a81a2	Alignment	not modelled	99.1	36	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
95	d1pica_	Alignment	not modelled	99.1	26	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
96	c2ysxA_	Alignment	not modelled	99.1	33	PDB header: signaling protein Chain: A: PDB Molecule: signaling inositol polyphosphate phosphatase PDBTitle: solution structure of the human ship sh2 domain
97	c1x6cA_	Alignment	not modelled	99.1	23	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
98	d1wfsa_	Alignment	not modelled	99.1	20	Fold: C2 domain-like Superfamily: C2 domain (Calcium/lipid-binding domain, CaLB) Family: Synaptotagmin-like (S variant)
99	d1csya_	Alignment	not modelled	99.1	27	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
100	c2cr4A_	Alignment	not modelled	99.1	25	PDB header: signaling protein Chain: A: PDB Molecule: sh3 domain-binding protein 2; PDBTitle: solution structure of the sh2 domain of human sh3bp2 protein
101	d1nrva_	Alignment	not modelled	99.1	23	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
102	d1jyra_	Alignment	not modelled	99.1	30	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
103	c2enjA_	Alignment	not modelled	99.1	14	PDB header: transferase Chain: A: PDB Molecule: protein kinase c theta type; PDBTitle: solution structure of the c2 domain from human protein2 kinase c theta
104	d1opka2	Alignment	not modelled	99.1	31	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
105	c1ka6A_	Alignment	not modelled	99.1	23	PDB header: immune system Chain: A: PDB Molecule: sh2 domain protein 1a; PDBTitle: sap/sh2d1a bound to peptide n-py
106	d1ayaa_	Alignment	not modelled	99.1	27	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
107	d1qcfa2	Alignment	not modelled	99.1	28	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
108	d1xa6a2	Alignment	not modelled	99.1	28	Fold: SH2-like Superfamily: SH2 domain

						Family: SH2 domain
109	d1rjaa_	Alignment	not modelled	99.1	27	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
110	c1cyjB_	Alignment	not modelled	99.1	26	PDB header: hydrolase Chain: B: PDB Molecule: protein (cytosolic phospholipase a2); PDBTitle: human cytosolic phospholipase a2
111	d2shpa3	Alignment	not modelled	99.1	28	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
112	c2ci8A_	Alignment	not modelled	99.1	25	PDB header: translation Chain: A: PDB Molecule: cytoplasmic protein nck1; PDBTitle: sh2 domain of human nck1 adaptor protein - uncomplexed
113	d1rpya_	Alignment	not modelled	99.1	24	Fold: SH2-like Superfamily: SH2 domain Family: SH2 domain
114	c2el8A_	Alignment	not modelled	99.1	20	PDB header: signaling protein Chain: A: PDB Molecule: signal-transducing adaptor protein 2; PDBTitle: solution structure of the human stap2 sh2 domain
115	d1w15a_	Alignment	not modelled	99.1	23	Fold: C2 domain-like Superfamily: C2 domain (Calcium/lipid-binding domain, CaLB) Family: Synaptotagmin-like (S variant)
116	c2knoA_	Alignment	not modelled	99.1	27	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)
117	c3fdwA_	Alignment	not modelled	99.1	22	PDB header: lipid binding protein Chain: A: PDB Molecule: synaptotagmin-like protein 4; PDBTitle: crystal structure of a c2 domain from human synaptotagmin-2 like protein 4
118	c3n5aA_	Alignment	not modelled	99.0	25	PDB header: protein transport Chain: A: PDB Molecule: synaptotagmin-7; PDBTitle: synaptotagmin-7, c2b-domain, calcium bound
119	c2dcrA_	Alignment	not modelled	99.0	25	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
120	c2fo0A_	Alignment	not modelled	99.0	22	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