



Phospho-RAF1 (Ser642) Antibody

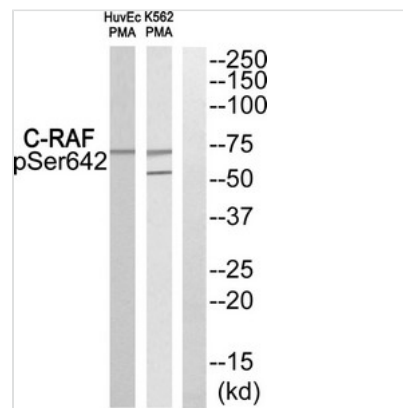
Product Code	CSB-PA148049
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P04049
Immunogen	Peptide sequence around phosphorylation site of Serine 642(T-T-S(p)-P-R) derived from Human C-RAF.
Raised In	Rabbit
Species Reactivity	Human,Mouse,Rat
Specificity	The antibody detects endogenous levels of C-RAF only when phosphorylated at serine 642.
Tested Applications	ELISA,WB;WB:1:500-1:1000
Relevance	Serine/threonine-protein kinase that acts as a regulatory link between the membrane-associated Ras GTPases and the MAPK/ERK cascade, and this critical regulatory link functions as a switch determining cell fate decisions including proliferation, differentiation, apoptosis, survival and oncogenic transformation. RAF1 activation initiates a mitogen-activated protein kinase (MAPK) cascade that comprises a sequential phosphorylation of the dual-specific MAPK kinases (MAP2K1/MEK1 and MAP2K2/MEK2) and the extracellular signal-regulated kinases (MAPK3/ERK1 and MAPK1/ERK2). The phosphorylated form of RAF1 (on residues Ser-338 and Ser-339, by PAK1) phosphorylates BAD/Bcl2-antagonist of cell death at 'Ser-75'. Phosphorylates adenylyl cyclases: ADCY2, ADCY5 and ADCY6, resulting in their activation. Phosphorylates PPP1R12A resulting in inhibition of the phosphatase activity. Phosphorylates TNNT2/cardiac muscle troponin T. Can promote NF-kB activation and inhibit signal transducers involved in motility (ROCK2), apoptosis (MAP3K5/ASK1 and STK3/MST2), proliferation and angiogenesis (RB1). Can protect cells from apoptosis also by translocating to the mitochondria where it binds BCL2 and displaces BAD/Bcl2-antagonist of cell death. Regulates Rho signaling and migration, and is required for normal wound healing. Plays a role in the oncogenic transformation of epithelial cells via repression of the TJ protein, occludin (OCLN) by inducing the up-regulation of a transcriptional repressor SNAI2/SLUG, which induces down-regulation of OCLN. Restricts caspase activation in response to selected stimuli, notably Fas stimulation, pathogen-mediated macrophage apoptosis, and erythroid differentiation. Bonner T.I., Nucleic Acids Res. 14:1009-1015(1986). Ota T., Nat. Genet. 36:40-45(2004). Mural R.J., Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.
Form	Rabbit IgG in phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Antibodies were produced by immunizing rabbits with synthetic phosphopeptide



and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. Non-phospho specific antibodies were removed by chromatography using

Clonality	Polyclonal
Alias	C-RAF; C-Raf; CRAF; RAF-1;
Product Type	Polyclonal Antibody
Species	Homo sapiens (Human)
Target Names	RAF1

Image



Western blot analysis of extracts from HuvEc cells and K562 cells treated with PMA using C-RAF (Phospho-Ser642) Antibody. The lane on the right is treated with the antigen-specific peptide.

Product Modify	Phospho-Ser642
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