Product Datasheet

C-RAF (Phospho-Ser642) Antibody

Catalog No: #11826

Package Size: #11826-1 50ul #11826-2 100ul

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

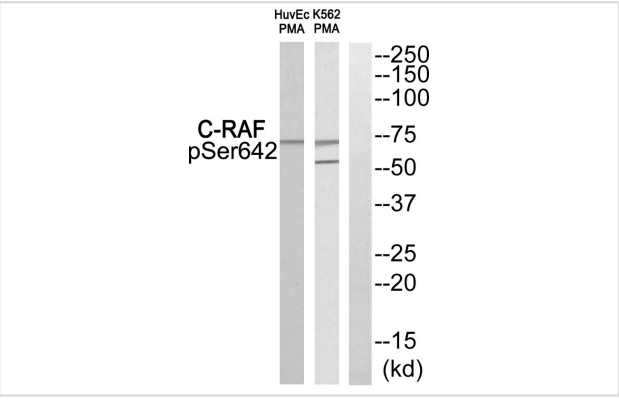
Description

Product Name	C-RAF (Phospho-Ser642) Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	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 chromatogramphy using non-phosphopeptide.
Applications	WB
Species Reactivity	Hu
Specificity	The antibody detects endogenous levels of C-RAF only when phosphorylated at serine 642.
Immunogen Type	Peptide-KLH
Immunogen Description	Peptide sequence around phosphorylation site of Serine 642(T-T-S(p)-P-R) derived from Human C-RAF.
Target Name	C-RAF
Modification	Phospho
Other Names	C-RAF; C-Raf; CRAF; RAF-1;
Accession No.	Swiss-Prot#: P04049; NCBI Gene#: 5894; NCBI Protein#: NP_002871.1.
Uniprot	P04049
GeneID	5894;
SDS-PAGE MW	74kd
Concentration	1.0mg/ml
Formulation	Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C/1 year

Application Details

Western blotting: 1:500~1:1000

Images



Western blot analysis of extracts from HuvEc cells and K562 cells treated with PMA using C-RAF (Phospho-Ser642) Antibody #11826.The lane on the right is treated with the antigen-specific peptide.

Background

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.

Note: This product is for in vitro research use only