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PRODUCT DATASHEET

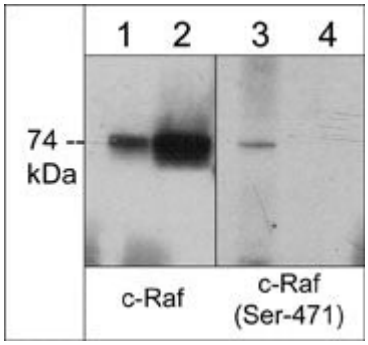
Anti-C-Raf (S471) [B-Raf (S579)/A-Raf (S432)], Phosphospecific Antibody

Product Details

Available Variants	100 µL (SKU:RP2901)
Conjugate	Unconjugated
Isotype	IgG
Gene Name	RAF1
Host Species	Rabbit
Format	Antigen Affinity Purified
Physical State	Liquid
Buffer	PBS + 1 mg/ml BSA, 0.05% NaN3 and 50% glycerol
Applications	ELISA, WB
Dilution Ranges	WB: 1:1000
Species Reactivity	Human, Mouse, Rat
Immunogen	A synthetic peptide (coupled to KLH) corresponding to amino acid residues surrounding Ser-471 in human C-Raf. This sequence has high homology with similar regions in rat and mouse C-Raf, and has high homology to the conserved sites in B-Raf (Ser-579) and A-Raf (Ser-432).
Specificity	This antibody was cross-adsorbed to phospho-C-Raf (Ser-338) peptide before affinity purification using phospho-C-Raf (Ser-471) peptide. The purified antibody detects a band at 74 kDa* corresponding to C-Raf in western blots of human Jurkat cells treated with Calyculin A, but is not observed after lambda phosphatase treatment.
Molecular Weight	74
Quality Control	Western blots performed on each lot.

Storage	Storage at -20°C is recommended, as aliquots may be taken without freeze/thawing due to presence of 50% glycerol. Stable for at least 1 year at -20°C.
UniProt ID	P04049 UniProt Summary: 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.
Country of Origin	United States
Shipping	Blue Ice
Expiration	After date of receipt, stable for at least 1 year at -20°C.
Usage Statement	For research use only. Not intended for therapeutic or diagnostic use. Use of all products is subject to our terms and conditions, which can be viewed on our website.
Post Translational Modification Type	Phosphorylated
Post Translational Modification Residue	Ser-471 [S578/S433]
NCBI Gene ID	5894

Product Images



Western blot of human Jurkat cells treated with calyculin A (100 nM) for 30 min. The blots were untreated (lanes 1 & 3) or treated (lanes 2 & 4) with lambda phosphatase and probed with anti-C-Raf (N-terminal region) (lanes 1 & 2) or anti-C-Raf (Ser-471) (lanes 3 & 4).