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PRODUCT DATASHEET

Anti-Raf-1 (Ser642) Antibody

phosphosolutions ANTIBODIES THAT WORK Pooled Serum

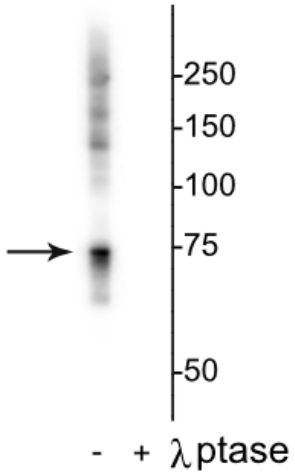
Product Details

Available Variants	100 µL (SKU:p1555-642) 25 µL (SKU:p1555-642t)
Conjugate	Unconjugated
Isotype	IgG
Gene Name	RAF1
Host Species	Rabbit
Format	Antigen Affinity Purified from Pooled Serum
Physical State	Liquid
Buffer	10 mM HEPES (pH 7.5), 150 mM NaCl, 100 µg per ml BSA and 50% glycerol.
Production Notes	Prepared from pooled rabbit serum by affinity purification via sequential chromatography on phospho and non-phosphopeptide affinity columns.
Applications	ELISA, WB
Dilution Ranges	WB: 1:1000
Species Reactivity	Human, Rat
Immunogen	Synthetic phospho-peptide corresponding to amino acid residues surrounding Ser642 of rat Raf-1, conjugated to keyhole limpet hemocyanin (KLH).
Specificity	Specific for endogenous levels of the ~74 kDa Raf-1 protein phosphorylated at Ser642. Immunolabeling is completely eliminated by treatment with λ-phosphatase.
Molecular Weight	74 kDa
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.
Antibody Registry ID	AB_2492224
UniProt ID	P11365 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. {ECO:0000269|PubMed:11427728, ECO:0000269|PubMed:11719507, ECO:0000269|PubMed:15385642, ECO:0000269|PubMed:15618521, ECO:0000269|PubMed:15849194, ECO:0000269|PubMed:16892053, ECO:0000269|PubMed:16924233, ECO:0000269|PubMed:9360956}.
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.
Expected Reactivity	Bovine, Canine, Chicken, Mouse, Non-Human Primate
Post Translational Modification Type	Phosphorylated
Post Translational Modification Residue	Ser642

NCBI Gene ID	24703

Product Images



Western blot of HeLa lysate showing specific labeling of the ~74 kDa Raf 1 protein phosphorylated at Ser642 in the first lane (-). Phosphospecificity is shown in the second lane (+) where the immunolabeling is completely eliminated by blot treatment with lambda phosphatase (λ-Ptase, 1200 units for 30 minutes).