

**Anti-Phospho-Raf1 (S621) Rabbit Monoclonal Antibody**  
**Catalog # ABO13148****Specification****Anti-Phospho-Raf1 (S621) Rabbit Monoclonal Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">P04049</a>
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid

**Description**

Anti-Phospho-Raf1 (S621) Rabbit Monoclonal Antibody . Tested in WB application. This antibody reacts with Human, Mouse, Rat.

**Anti-Phospho-Raf1 (S621) Rabbit Monoclonal Antibody - Additional Information**

**Gene ID** 5894

**Other Names**

RAF proto-oncogene serine/threonine-protein kinase, 2.7.11.1, Proto-oncogene c-RAF, cRaf, Raf-1, RAF1 ([http://www.genenames.org/cgi-bin/gene\\_symbol\\_report?hgnc\\_id=9829](http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=9829)), RAF

**Calculated MW**

73052 MW KDa

**Application Details**

WB 1:500-1:2000

**Subcellular Localization**

Cytoplasm. Cell membrane. Mitochondrion. Nucleus. Colocalizes with RGS14 and BRAF in both the cytoplasm and membranes. Phosphorylation at Ser-259 impairs its membrane accumulation. Recruited to the cell membrane by the active Ras protein. Phosphorylation at Ser-338 and Ser-339 by PAK1 is required for its mitochondrial localization. Retinoic acid- induced Ser-621 phosphorylated form of RAF1 is predominantly localized at the nucleus.

**Tissue Specificity**

In skeletal muscle, isoform 1 is more abundant than isoform 2..

**Contents**

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

**Immunogen**

A synthesized peptide derived from human Phospho-Raf1 (S621)

**Purification**

Affinity-chromatography

Storage

**Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.**

## **Anti-Phospho-Raf1 (S621) Rabbit Monoclonal Antibody - Protein Information**

**Name** RAF1 ([HGNC:9829](#))

**Synonyms** RAF

### **Function**

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- $\kappa$ B 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.

### **Cellular Location**

Cytoplasm. Cell membrane. Mitochondrion. Nucleus. Note=Colocalizes with RGS14 and BRAF in both the cytoplasm and membranes. Phosphorylation at Ser-259 impairs its membrane accumulation. Recruited to the cell membrane by the active Ras protein Phosphorylation at Ser-338 and Ser-339 by PAK1 is required for its mitochondrial localization. Retinoic acid-induced Ser-621 phosphorylated form of RAF1 is predominantly localized at the nucleus

### **Tissue Location**

In skeletal muscle, isoform 1 is more abundant than isoform 2.

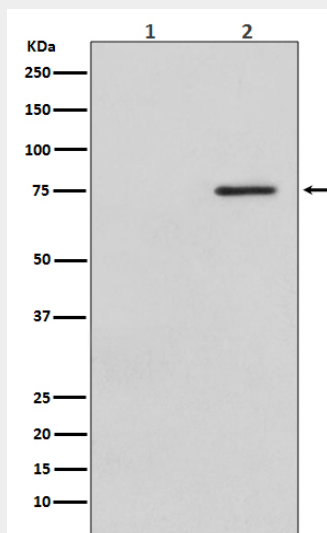
## **Anti-Phospho-Raf1 (S621) Rabbit Monoclonal Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

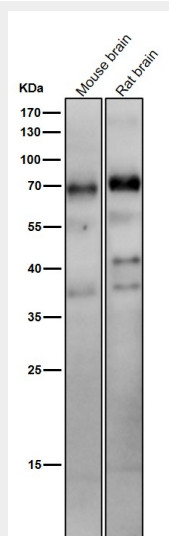
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)

- [Flow Cytometry](#)
- [Cell Culture](#)

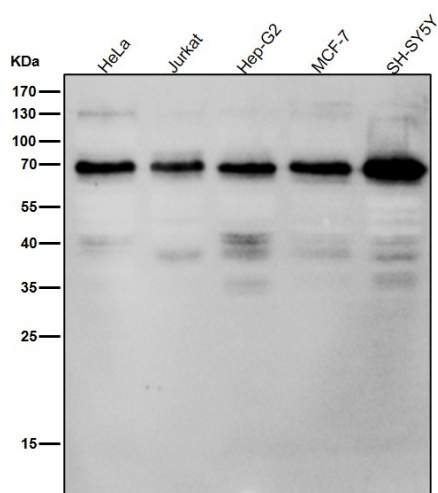
### Anti-Phospho-Raf1 (S621) Rabbit Monoclonal Antibody - Images



Western blot analysis of Phospho-Raf1 (S621) expression in (1) HeLa cell lysate treated with LP; (2) HeLa cell lysate.



All lanes use the Antibody at 1:2K dilution for 1 hour at room temperature.



All lanes use the Antibody at 1:2K dilution for 1 hour at room temperature.