

### **Anti-RAF1 / RAF Antibody (N-Terminus)**

Mouse Anti Human Monoclonal Antibody Catalog # ALS17718

### **Specification**

### Anti-RAF1 / RAF Antibody (N-Terminus) - Product Information

Application WB, IHC-P, E
Primary Accession P04049
Predicted Human
Host Mouse
Clonality Monoclonal
Isotype IgG1,k
Calculated MW 73052

Dilution WB~~1:1000 IHC-P~~N/A

E~~N/A

# Anti-RAF1 / RAF Antibody (N-Terminus) - Additional Information

**Gene ID 5894** 

Alias Symbol RAF1

**Other Names** 

RAF1, C-Raf, C-raf-1, CRAF, NS5, Raf-1, Proto-oncogene c-RAF, Oncogene RAF1, RAF, Raf1 kinase

# **Target/Specificity**

Recognizes human Raf-1 N-terminal, aa1-240.

### **Reconstitution & Storage**

Protein G purified

#### **Precautions**

Anti-RAF1 / RAF Antibody (N-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

## Anti-RAF1 / RAF Antibody (N-Terminus) - 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-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.

#### **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-RAF1 / RAF Antibody (N-Terminus) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-RAF1 / RAF Antibody (N-Terminus) - Images