

**Mouse Raf1 Antibody (N-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP14280a**

**Specification**

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**Mouse Raf1 Antibody (N-term) - Product Information**

Application	WB, IHC-P, FC,E
Primary Accession	<a href="#">O99N57</a>
Other Accession	<a href="#">P11345</a> , <a href="#">NP_084056.1</a>
Reactivity	Human, Mouse
Predicted	Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	86-113

**Mouse Raf1 Antibody (N-term) - Additional Information**

**Gene ID** 110157

**Other Names**

RAF proto-oncogene serine/threonine-protein kinase, Proto-oncogene c-RAF, cRaf, Raf-1, Raf1, CraF

**Target/Specificity**

This Mouse Raf1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 86-113 amino acids from the N-terminal region of mouse Raf1.

**Dilution**

WB~~1:1000  
IHC-P~~1:10~50  
FC~~1:10~50

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Mouse Raf1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**Mouse Raf1 Antibody (N-term) - Protein Information**

**Name** Raf1

## Synonyms Craf

**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. 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 (By similarity). Regulates Rho signaling and migration, and is required for normal wound healing.

## 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 (By similarity). Retinoic acid- induced Ser-621 phosphorylated form of RAF1 is predominantly localized at the nucleus.

## Tissue Location

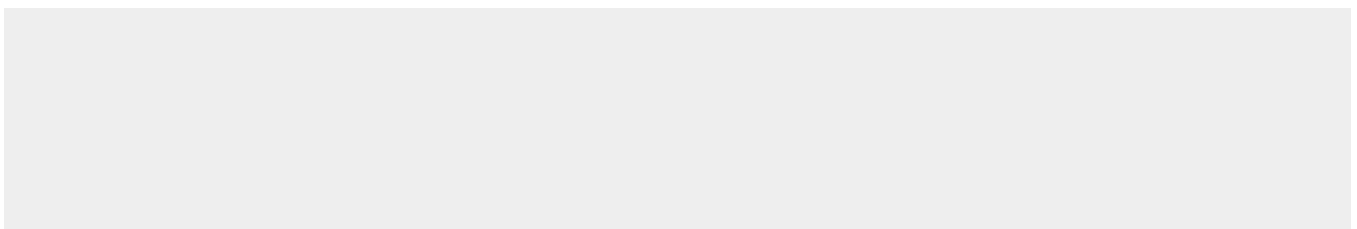
Present in all tissues tested: testis, ovary, small intestine, colon, peripheral blood leukocytes, fetal liver, bone marrow, thymus, lymph node and spleen, and the cell lines melanoma G- 361, lung carcinoma A-549, colorectal adenocarcinoma SW480, Burkitt's lymphoma Raji and lymphoblastic leukemia MOLT-4. In skeletal muscle, isoform 1 is more abundant than isoform 2

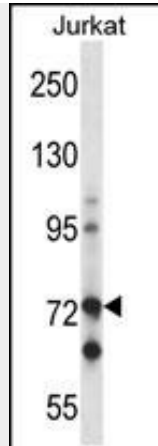
## Mouse Raf1 Antibody (N-term) - Protocols

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

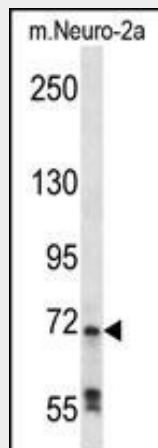
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## Mouse Raf1 Antibody (N-term) - Images

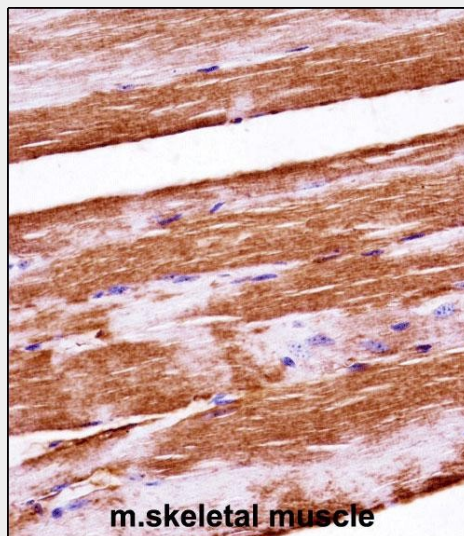




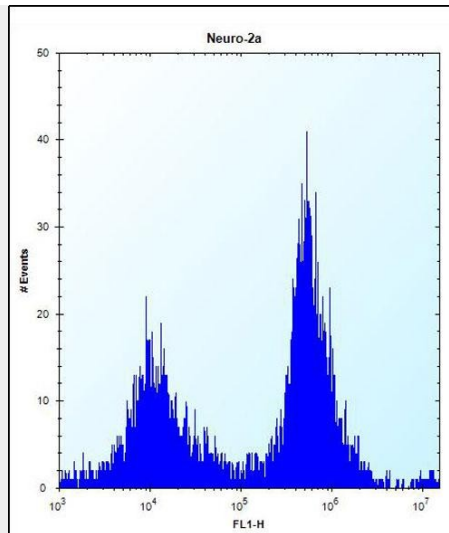
Mouse Raf1 Antibody (N-term) (Cat. #AP14280a) western blot analysis in Jurkat cell line lysates (35ug/lane). This demonstrates the Raf1 antibody detected the Raf1 protein (arrow).



Mouse Raf1 Antibody (N-term) (Cat. #AP14280a) western blot analysis in mouse Neuro-2a cell line lysates (35ug/lane). This demonstrates the Raf1 antibody detected the Raf1 protein (arrow).



Mouse Raf1 Antibody (N-term) (AP14280a) immunohistochemistry analysis in formalin fixed and paraffin embedded mouse skeletal muscle followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of Mouse Raf1 Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.



Mouse Raf1 Antibody (N-term) (Cat. #AP14280a) flow cytometric analysis of Neuro-2a cells (right histogram) compared to a negative control cell (left histogram). FITC-conjugated donkey-anti-rabbit secondary antibodies were used for the analysis.

#### **Mouse Raf1 Antibody (N-term) - Background**

Involved in the transduction of mitogenic signals from the cell membrane to the nucleus. Part of the Ras-dependent signaling pathway from receptors to the nucleus. Protects cells from apoptosis mediated by STK3 (By similarity).

#### **Mouse Raf1 Antibody (N-term) - References**

- Niault, T.S., et al. *Carcinogenesis* 31(7):1165-1174(2010)
- Batarseh, A., et al. *Biochemistry* 49(23):4766-4778(2010)
- Tarutani, M., et al. *J. Dermatol. Sci.* 58(1):28-35(2010)
- Heidorn, S.J., et al. *Cell* 140(2):209-221(2010)
- Niault, T., et al. *J. Cell Biol.* 187(3):335-342(2009)