

## **Raf-1 Polyclonal Antibody**

Catalog No: YT3979

**Reactivity:** Human; Mouse; Rat

**Applications:** WB;IHC;IF;ELISA

Target: Raf-1

Fields: >>EGFR tyrosine kinase inhibitor resistance;>>Endocrine resistance;>>MAPK

signaling pathway;>>ErbB signaling pathway;>>Ras signaling pathway;>>Rap1

signaling pathway;>>cGMP-PKG signaling pathway;>>cAMP signaling

pathway;>>Chemokine signaling pathway;>>FoxO signaling

pathway;>>Sphingolipid signaling pathway;>>Phospholipase D signaling pathway;>>Autophagy - animal;>>mTOR signaling pathway;>>PI3K-Akt signaling pathway;>>Apoptosis;>>Cellular senescence;>>Vascular smooth muscle contraction;>>Axon guidance;>>VEGF signaling pathway;>>Apelin signaling pathway;>>Focal adhesion;>>Gap junction;>>Signaling pathways

regulating pluripotency of stem cells;>>Neutrophil extracellular trap formation;>>C-type lectin receptor signaling pathway;>>JAK-STAT signaling pathway;>>Natural killer cell mediated cytotoxicity;>>T cell receptor signaling pathway;>>B cell receptor signaling pathway;>>Fc epsilon RI signaling pathway;>>Fc gamma R-mediated phagocytosis;>>Long-term potentiation:>>Neurotrophin signaling pathway;>>

Gene Name: RAF1

**Protein Name:** RAF proto-oncogene serine/threonine-protein kinase

Human Gene ld: 5894

Human Swiss Prot P04049

No:

Mouse Gene ld: 110157

**Mouse Swiss Prot** 

Q99N57

No:

Rat Gene ld: 24703

Rat Swiss Prot No: P11345

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**Immunogen:** The antiserum was produced against synthesized peptide derived from human

C-RAF. AA range:11-60

**Specificity:** Raf-1 Polyclonal Antibody detects endogenous levels of Raf-1 protein.

**Formulation :** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

**Source :** Polyclonal, Rabbit, IgG

**Dilution :** WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:5000.. IF 1:50-200

**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 73kD

**Cell Pathway:** MAPK\_ERK\_Growth;MAPK\_G\_Protein;ErbB\_HER;Chemokine;Vascular

smooth muscle contraction; VEGF; Focal adhesion; Gap junction; Natural killer cell

mediated cytotoxicity; T Cell Receptor; B Cell Antigen; Fc epsilo

**Background:** This gene is the cellular homolog of viral raf gene (v-raf). The encoded protein is

a MAP kinase kinase kinase (MAP3K), which functions downstream of the Ras family of membrane associated GTPases to which it binds directly. Once activated, the cellular RAF1 protein can phosphorylate to activate the dual specificity protein kinases MEK1 and MEK2, which in turn phosphorylate to activate the serine/threonine specific protein kinases, ERK1 and ERK2. Activated ERKs are pleiotropic effectors of cell physiology and play an important role in the control of gene expression involved in the cell division cycle, apoptosis, cell differentiation and cell migration. Mutations in this gene are associated with Noonan syndrome 5 and LEOPARD syndrome 2. [provided by RefSeq, Jul 2008],

**Function:** catalytic activity:ATP + a protein = ADP + a phosphoprotein.,cofactor:Binds 2

zinc ions per subunit., disease: Defects in RAF1 are the cause of LEOPARD syndrome type 2 (LEOPARD syndrome-2) [MIM:611554]. LEOPARD syndrome is an autosomal dominant disorder allelic with Noonan syndrome. The acronym LEOPARD stands for lentigines, electrocardiographic conduction abnormalities, ocular hypertelorism, pulmonic stenosis, abnormalities of genitalia, retardation of growth, and deafness., disease: Defects in RAF1 are the cause of Noonan syndrome type 5 (NS5) [MIM:611553]. Noonan syndrome (NS) is a disorder characterized by dysmorphic facial features, short stature, hypertelorism, cardiac

anomalies, deafness, motor delay, and a bleeding diathesis. It is a genetically heterogeneous and relatively common syndrome, with an estimated incidence of

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1 in 1000-2500 live births., function: Involved in the transducti

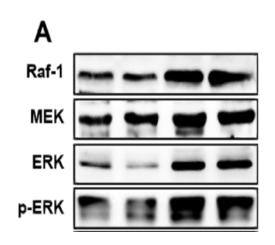
## Subcellular Location:

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.

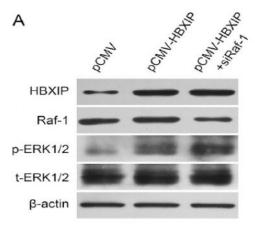
## **Expression:**

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

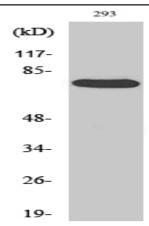
## **Products Images**



Ambient NO2 hinders neutrophil extracellular trap formation in rats: Assessment of the role of neutrophil autophagy. Fang Xiao WB Rat 1:1000 neutrophils

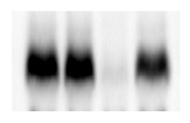


Western blot analysis in MCF-7 cells transfected with siRaf-1. Cancer Letters 355 (2014) 288–296

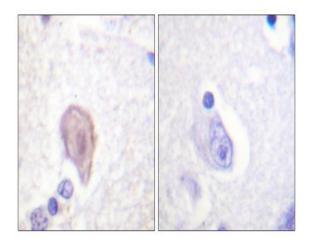


Western Blot analysis of various cells using Raf-1 Polyclonal Antibody diluted at 1:2000

The picture was kindly provided by our customer

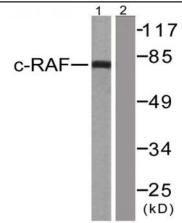


Raf-1



Immunohistochemistry analysis of paraffin-embedded human brain tissue, using C-RAF Antibody. The picture on the right is blocked with the synthesized peptide.





Western blot analysis of lysates from 293 cells, treated with PMA 125ng/ml 30', using C-RAF Antibody. The lane on the right is blocked with the synthesized peptide.