

## **Product datasheet for TA385124**

### **OriGene Technologies, Inc.** 9620 Medical Center Drive, Ste 200

Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

# RAF1 Rabbit Monoclonal Antibody [Clone ID: R07-4J4]

#### **Product data:**

**Product Type:** Primary Antibodies

Clone Name: R07-4J4

Applications: IHC, WB

Recommended Dilution: WB: 1/1000

IHC: 1/20

Reactivity: Human, Mouse, Rat

Host: Rabbit Isotype: IgG

Clonality: Monoclonal

**Immunogen:** A synthetic phosphopeptide corresponding to residues surrounding Ser259 of human Raf1

(Phosphorylated)

Formulation: 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40% Glycerol, 0.01% Sodium azide and 0.05% BSA

**Concentration:** lot specific

Purification:Affinity PurifiedConjugation:Unconjugated

Storage: Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

Stability: 1 year

Predicted Protein Size: Calculated MW: 73 kDa; Observed MW: 73 kDa

Gene Name: Raf-1 proto-oncogene, serine/threonine kinase

Database Link: Entrez Gene 5894 Human

P04049



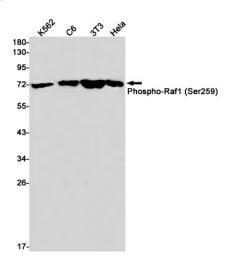


### Background:

Swiss-Prot Acc. P04049. 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 NFkB 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, pathogenmediated macrophage apoptosis, and erythroid differentiation.

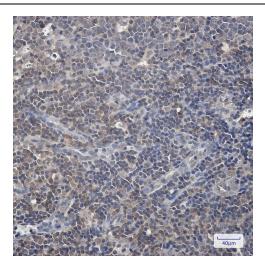
**Synonyms:** C-RAF; CRAF; NS5; RAF; Raf-1

# **Product images:**



Western blot analysis of Phospho-Raf1 (Ser259) in K562, C6, 3T3, Hela lysates using Phospho-Raf1 (Ser259) antibody.





Immunohistochemistry analysis of paraffinembedded Human tonsil using Raf1 (Phospho-Ser259) antibody. High-pressure and temperature Sodium Citrate pH 6.0 was used for antigen retrieval.