

KD-Validated Anti-Raf1 Rabbit Monoclonal Antibody
Rabbit monoclonal antibody
Catalog # AGI1278**Specification****KD-Validated Anti-Raf1 Rabbit Monoclonal Antibody - Product Information**

Application	WB, FC, ICC
Primary Accession	P04049
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Isotype	Rabbit IgG
Calculated MW	Predicted, 73 kDa , observed, 74 kDa KDa
Gene Name	RAF1
Aliases	RAF1; Raf-1 Proto-Oncogene, Serine/Threonine Kinase; Raf-1; CRAF; RAF Proto-Oncogene Serine/Threonine-Protein Kinase; V-Raf-1 Murine Leukemia Viral Oncogene Homolog 1; C-Raf Proto-Oncogene, Serine/Threonine Kinase; Proto-Oncogene C-RAF; EC 2.7.11.1; C-Raf; V-Raf-1 Murine Leukemia Viral Oncogene-Like Protein 1; Raf Proto-Oncogene Serine/Threonine Protein Kinase; Oncogene RAF1; EC 2.7.11; CMD1NN; C-RAF; RAF-1; CRaf; NS5; RAF
Immunogen	A synthesized peptide derived from human Raf1

KD-Validated Anti-Raf1 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 target="_blank">HGNC:9829), RAF

KD-Validated Anti-Raf1 Rabbit Monoclonal Antibody - Protein InformationName 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- κ 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

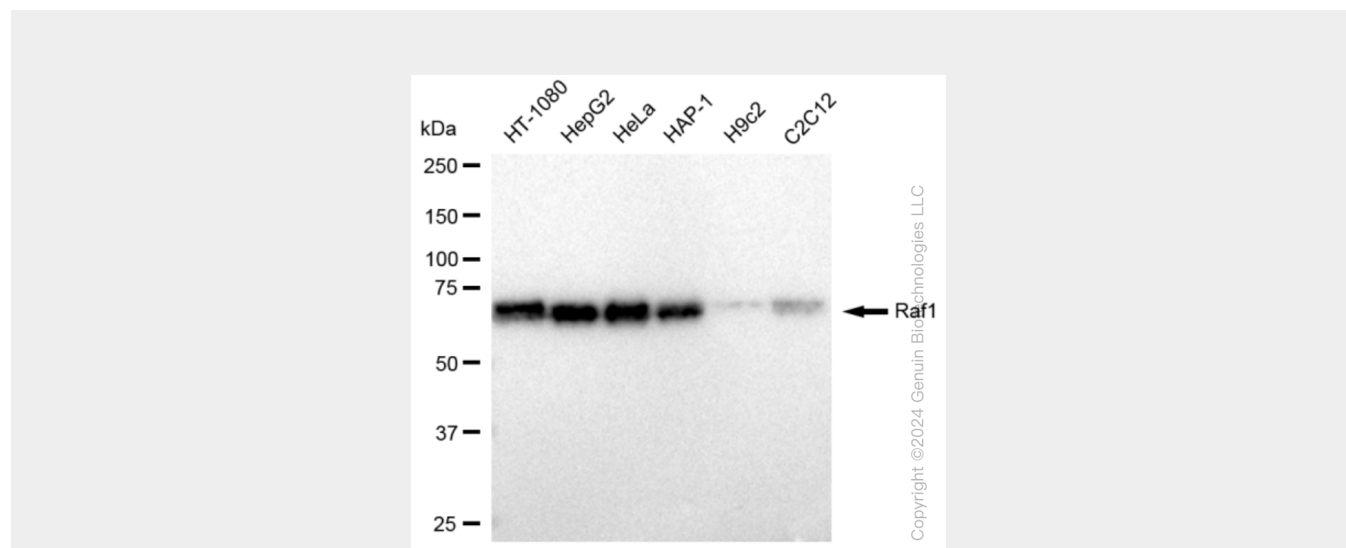
In skeletal muscle, isoform 1 is more abundant than isoform 2.

KD-Validated Anti-Raf1 Rabbit Monoclonal Antibody - Protocols

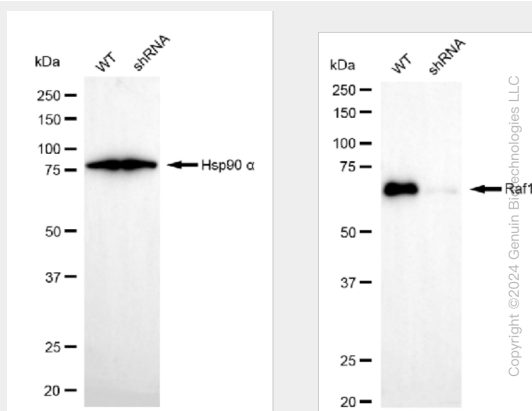
Provided below are standard protocols that you may find useful for product applications.

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

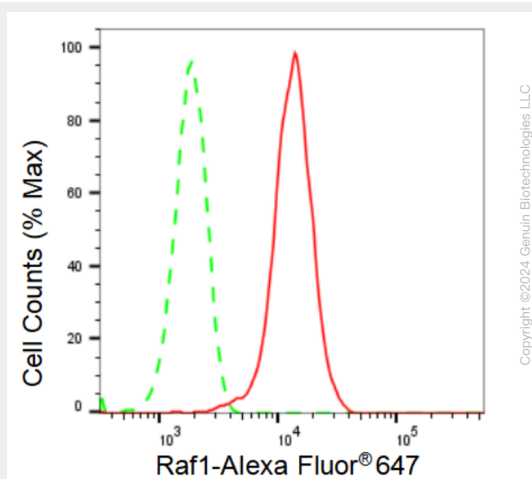
KD-Validated Anti-Raf1 Rabbit Monoclonal Antibody - Images



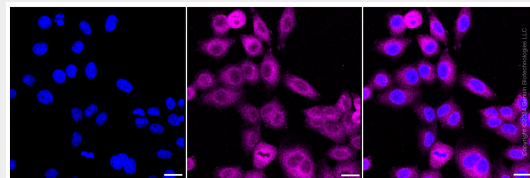
Western blotting analysis using anti-Raf1 antibody (Cat#AGI1278). Total cell lysates (30 μ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-Raf1 antibody (Cat#AGI1278, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Western blotting analysis using anti-Raf1 antibody (Cat#AGI1278). Raf1 expression in wild type (WT) and Raf1 shRNA knockdown (KD) HeLa cells with 30 μ g of total cell lysates. β -Tubulin serves as a loading control. The blot was incubated with anti-Raf1 antibody (Cat#AGI1278, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of Raf1 expression in HepG2 cells using Raf1 antibody (Cat#AGI1278, 1:2,000). Green, isotype control; red, Raf1.



Immunocytochemical staining of HepG2 cells with Raf1 antibody (Cat#AGI1278, 1:1,000). Nuclei were stained blue with DAPI; Raf1 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20 μ m.