

Product Name: KD-Validated Raf1 Recombinant Rabbit Monoclonal Antibody**Catalog #: KVA01483**

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000
Molecular Weight	Calculated MW: 73.1kDa

Antigen Information

Gene Name	RAF1
Alternative Names	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
Gene ID	5894.0
SwissProt ID	P04049
Immunogen	A synthesized peptide derived from human Raf1

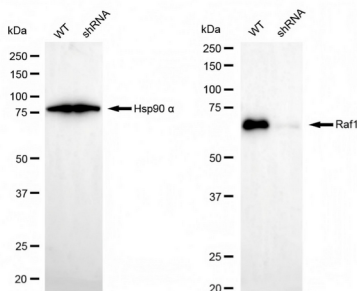
Background

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]

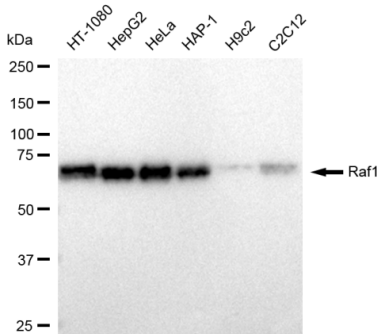
Research Area

Signal Transduction,Cell Biology,Cancer,Metabolism

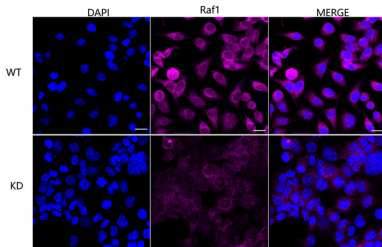
Image Data



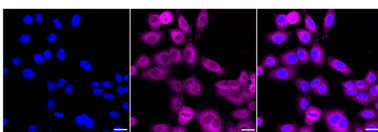
Western blotting analysis using Raf1 antibody (KVA01483). Raf1 expression in wild type (WT) and Raf1 shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with Raf1 antibody (KVA01483, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



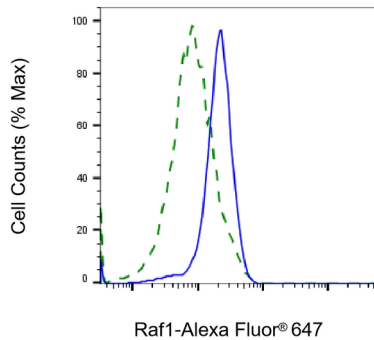
Western blotting analysis using Raf1 antibody (KVA01483). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with Raf1 antibody (KVA01483, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



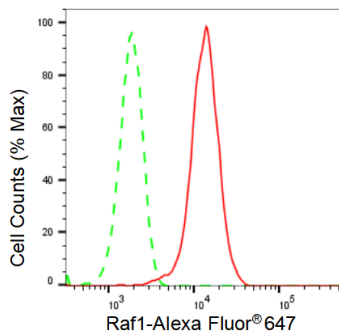
Immunocytochemical staining of HeLa cells using Raf1 antibody (KVA01483, 1:1,000), Top panel: wild-type (WT); Bottom panel: Raf1 shRNA knockdown (KD). Nuclei were stained blue with DAPI; Raf1 was stained magenta with Alexa Fluor® 647. Scale bar, 20 µm. Permeabilization: Triton.



Immunocytochemical staining of HepG2 cells with Raf1 antibody (KVA01483, 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 µm.



Validation of Raf1 knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with Raf1 antibody (KVA01483, 1:2,000) and analyzed using CytoFLEX.



Flow cytometric analysis of Raf1 expression in HepG2 cells using Raf1 antibody (KVA01483, 1:2,000). Green, isotype control; red, Raf1.