

Product Name: KD-Validated RAS P21 Protein Activator 1 Recombinant Rabbit Monoclonal Antibody

Catalog #: KVA01306

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,ICC,IHC-P
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; ICC 1:100-1:1,000; IHC-P 1:100-1:200
Molecular Weight	Calculated MW: 116.4kDa

Antigen Information

Gene Name	RASA1 RASA1; RAS P21 Protein Activator 1; P120GAP; GAP; Ras GTPase-Activating Protein 1; P120RASGAP; CM-AVM; P120; RASA; RAS P21 Protein Activator (GTPase Activating Protein)
Alternative Names	1; P120 RAS GTPase Activating Protein; Capillary Malformation-Arteriovenous Malformation; Triphosphatase-Activating Protein; GTPase-Activating Protein; Ras P21 Protein Activator; CMAVM1; RASGAP; RasGAP; CMAVM; PKWS
Gene ID	5921.0
SwissProt ID	P20936
Immunogen	A synthesized peptide derived from human RASA1

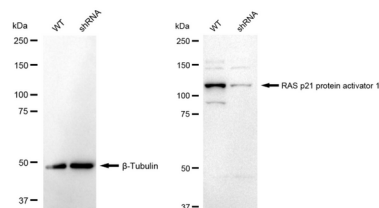
Background

The protein encoded by this gene is located in the cytoplasm and is part of the GAP1 family of GTPase-activating proteins. The gene product stimulates the GTPase activity of normal RAS p21 but not its oncogenic counterpart. Acting as a suppressor of RAS function, the protein enhances the weak intrinsic GTPase activity of RAS proteins resulting in the inactive GDP-bound form of RAS, thereby allowing control of cellular proliferation and differentiation. Mutations leading to changes in the binding sites of either protein are associated with basal cell carcinomas. Mutations also have been associated with hereditary capillary malformations (CM) with or without arteriovenous malformations (AVM) and Parkes Weber syndrome. Alternative splicing results in two isoforms where the shorter isoform, lacking the N-terminal hydrophobic region but retaining the same activity, appears to be abundantly expressed in placental but not adult tissues. [provided by RefSeq, May 2012]

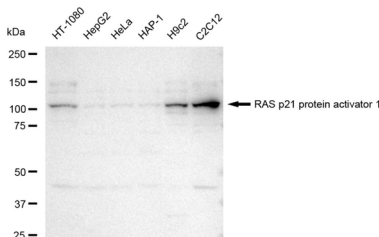
Research Area

Signal Transduction,Cancer

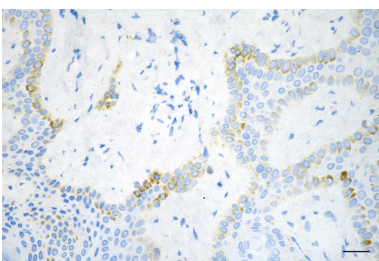
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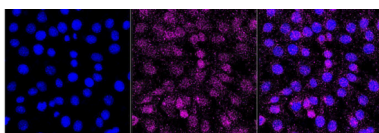
Western blotting analysis using RAS p21 protein activator 1 antibody (KVA01306). RAS p21 protein activator 1 expression in wild type (WT) and RAS p21 protein activator 1 (RASA1) shRNA knockdown (KD) HT-1080 cells with 30 µg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with RAS p21 protein activator 1 antibody (KVA01306, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Western blotting analysis using RAS p21 protein activator 1 antibody (KVA01306). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with RAS p21 protein activator 1 antibody (KVA01306, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Immunohistochemistry was performed on paraffin-embedded human hemangioma using RAS p21 protein activator 1 antibody (KVA01306, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.



Immunocytochemical staining of C2C12 cells with RAS p21 protein activator 1 antibody (KVA01306, 1:1,000). Nuclei were stained blue with DAPI; RAS p21 protein activator 1 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Low. Scale bar, 20 µm.