[KD Validated] Anti-RASA1 Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

Catalog # R021380

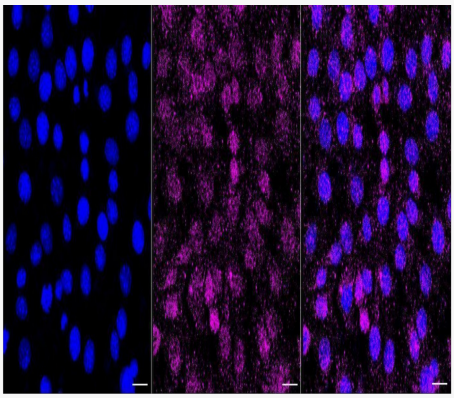
Product Information

Application	WB, IF (Cell)/ICC
Reactivity	Human, Mouse, Rat
Dilution	WB 1:1,000~1:5,000; IF 1:100~1:1,000
Host	Rabbit
Clonality	Monoclonal
Clone No.	68A51S79
Isotype	IgG
Label	Unconjugated
Immunogen	A synthesized peptide derived from human RASA1
Format	Affinity purified monoclonal antibody supplied in PBS with 0.02% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 12 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	[KD Validated] Anti-RASA1 Rabbit mAb [68A51S79] is for research use only and not for use in diagnostic or therapeutic procedures.

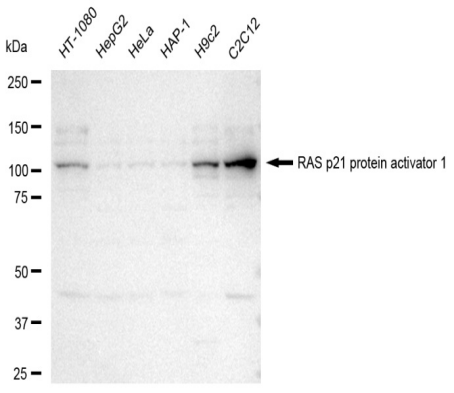
Protein Information

Synonyms	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) 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.
Calculated MW	Calculated MW: 116 kDa, Observed MW: 116 kDa
Uniprot ID	P20936
Gene ID	5921
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]
Cellular Location	Cytoplasm.

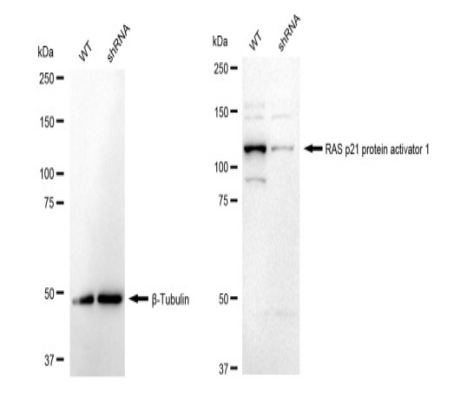
Validation Images



Immunocytochemical staining of C2C12 cells with RAS p21 protein activator 1 antibody (R021380, 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.



Western blotting analysis using RAS p21 protein activator 1 antibody (R021380). 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 (R021380, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (1:20,000) respectively. Image was developed using ECL Substrate Kit.



Western blotting analysis using RAS p21 protein activator 1 antibody (R021380). RAS p21 protein activator 1 expression in wild type (WT) and RAS p21 protein activator 1 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 (R021380, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (1:20,000) respectively. Image was developed using ECL Substrate Kit.