Anti-RASA1 Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

Catalog # R010396

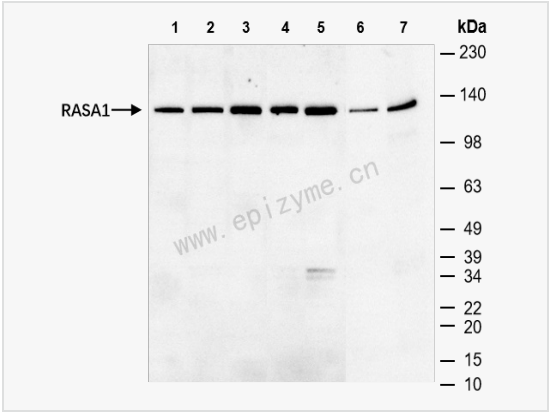
Product Information

Application	WB, IHC-P/IF (Tissue-P), IF (Cell)/ICC, ELISA
Reactivity	Human, Mouse, Rat
Dilution	WB 1:1,000~1:2,000; IHC-P 1:100~1:200; IF 1:100~1:200
Host	Rabbit
Clonality	Monoclonal
Clone No.	28M52K67
Isotype	IgG
Label	Unconjugated
Immunogen	A synthesized peptide derived from human RASA1
Format	Affinity purified monoclonal antibody supplied in PBS with 0.01% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	Anti-RASA1 Rabbit mAb [28M52K67] is for research use only and not for use in diagnostic or therapeutic procedures.

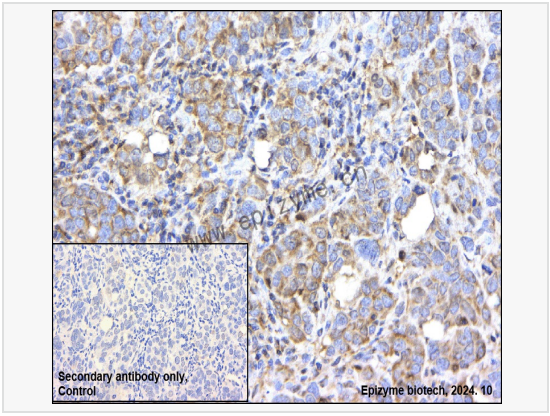
Protein Information

Synonyms	CM AVM, CMAVM, DKFZp434N071, GAP, GTPase activating protein, GTPase-activating protein, OTTHUMP00000222390, OTTHUMP00000222391, OTTHUMP00000222392, OTTHUMP00000222393, p120GAP, p120RASGAP, PKWS, Ras GTPase-activating protein 1, RAS p21 protein activator (GTPase activating protein) 1, Ras p21 protein activator, RASA, RASA1, RASA1_HUMAN, RasGAP, Triphosphatase activating protein.
Calculated MW	Calculated MW: 116 kDa; Observed MW: 120 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.
Tissue Location	In placental villi, detected only in the trophoblast layer (cytotrophoblast and syncytiotrophoblast). Not detected in stromal,

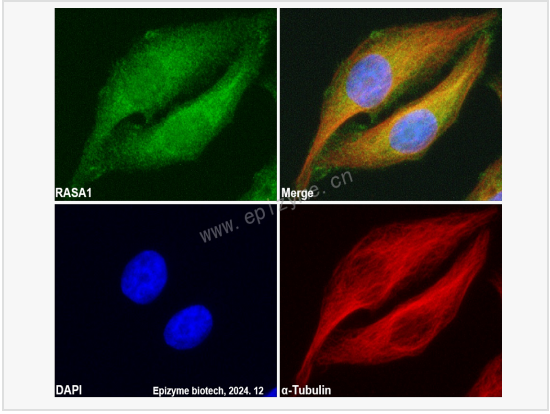
Validation Images



Western Blot - Anti-RASA1 Rabbit mAb [28M52K67]
All lanes: R010396 at 1:1,000 dilution
Lane 1: HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates
Lane 2: HepG2 (Human hepatocarcinoma epithelial cell) whole cell lysates
Lane 3: HCT116 (Human colorectal carcinoma epithelial cell) whole cell lysates
Lane 4: T24 (Human bladder cancer epithelial cell) whole cell lysates
Lane 5: Raw264.7 (Mouse mononuclear macrophage leukemia cell) whole cell lysate
Lane 6: Rat spleen whole tissue lysates
Lysates/proteins at 10 µg per lane.
Secondary antibody: Goat Anti-Rabbit IgG(H+L), HRP Conjugated (Cat. No. LF102) at 1:5,000 dilution
Predicted band size: 116 kDa
Observed band size: 120 kDa
Developed using the ECL technique (Cat. No. SQ201).



Immunohistochemistry - Anti-RASA1 Rabbit mAb [28M52K67]
Sample: Paraformaldehyde-fixed, paraffin embedded human ovarian cancer tissue
Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.
Primary antibody: R010396 at 1:200 dilution
Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution
DAB was used as the chromogen.
Counter stained with hematoxylin.
Positive/negative staining were presented.
Only the secondary antibody was used as the negative control.



Immunofluorescence - Anti-RASA1 Rabbit mAb [28M52K67]
Sample: HeLa cells
The cells were fixed with 4% paraformaldehyde (10 min), permeabilized with 0.5% Triton X-100 for 10 minutes and then blocked with 5% BSA in 0.1% PBS-Tween for 0.5 hours.
Primary antibodies: R010396 at 1:100 dilution and α-tubulin Mouse Monoclonal Antibody (Cat. No. LF209) at 1:100 dilution
Secondary antibodies: Goat anti-Rabbit (488) at 1:1,000 dilution (shown in green) and Goat anti-Mouse (555) at 1:1,000 dilution (shown in red)
Nuclei were stained with DAPI (shown in blue).