10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-RASA1 Picoband Antibody

Catalog # ABO12482

Product Information

Application	WB
Primary Accession	P20936
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Ras GTPase-activating protein 1(RASA1) detection. Tested with WB in Human.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	5921
Other Names	Ras GTPase-activating protein 1, GAP, GTPase-activating protein, RasGAP, Ras p21 protein activator, p120GAP, RASA1, GAP, RASA
Calculated MW	116403
Application Details	Western blot, 0.1-0.5 □g/ml, Human
Subcellular Localization	Cytoplasm .
Tissue Specificity	In placental villi, detected only in the trophoblast layer (cytotrophoblast and syncytiotrophoblast). Not detected in stromal, endothelial or Hofbauer cells (at protein level). .
Source	Eukaryota
Protein Name	Ras GTPase-activating protein 1
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human RASA1 (1018-1047aa AQQHVLKKLLAITELLQQKQNQYTKTNDVR), different from the related rat sequence by one amino acid.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins.
Storage	At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also

be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.

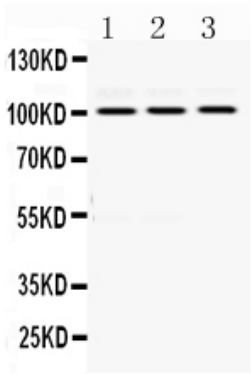
Protein Information

Name	RASA1 (HGNC:9871)
Synonyms	GAP, RASA
Function	GTPase-activating protein (GAP) that stimulates the intrinsic GTPase activity of Ras proteins, such as NRAS, facilitating their transition from the active GTP-bound state to the inactive GDP-bound state, thereby terminating Ras signaling.
Cellular Location	Cytoplasm.
Tissue Location	In placental villi, detected only in the trophoblast layer (cytotrophoblast and syncytiotrophoblast). Not detected in stromal, endothelial or Hofbauer cells (at protein level)

Background

RASA1, also known as RAS p21 protein activator 1, is a 120-kDacytosolic human protein. 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.

Images



Anti- RASA1 Picoband antibody, ABO12482, Western blottingAll lanes: Anti RASA1 (ABO12482) at 0.5ug/mlLane 1: HELA Whole Cell Lysate at 40ugLane 2: MCF-7 Whole Cell Lysate at 40ugLane 3: SMMC Whole Cell Lysate at 40ugPredicted bind size: 100KDObserved bind size: 100KD