

# Anti-RASA1 Picoband Antibody

Catalog # ABO12482

### Specification

## Anti-RASA1 Picoband Antibody - Product Information

Application	WB	
Primary Accession	<u>P20936</u>	
Host	Rabbit	
Reactivity	Human	
Clonality	Polyclonal	
Format	Lyophilized	
Description		
Rabbit IgG polyclonal antibody for	Ras GTPase-activating protein 1(RASA1) detection. Tested with	h
WB in Human.		

**Reconstitution** Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

## Anti-RASA1 Picoband Antibody - 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 MW KDa

**Application Details** Western blot, 0.1-0.5 μg/ml, Human<br>

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).

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.

# Anti-RASA1 Picoband Antibody - Protein Information

Name RASA1

Synonyms GAP, RASA

Function

Inhibitory regulator of the Ras-cyclic AMP pathway. Stimulates the GTPase of normal but not oncogenic Ras p21; this stimulation may be further increased in the presence of NCK1.

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)

### Anti-RASA1 Picoband Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

### Anti-RASA1 Picoband Antibody - 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

## Anti-RASA1 Picoband Antibody - 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.