

## **ARHGEF4 Antibody (C-term)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP18666B

## **Specification**

# ARHGEF4 Antibody (C-term) - Product Information

**Application** WB,E **Primary Accession 09NR80** Other Accession NP 056135.2 Reactivity Human Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG Calculated MW 79067 Antigen Region 573-599

## ARHGEF4 Antibody (C-term) - Additional Information

#### **Gene ID** 50649

### **Other Names**

Rho guanine nucleotide exchange factor 4, APC-stimulated guanine nucleotide exchange factor 1, Asef, Asef1, ARHGEF4, KIAA1112

### Target/Specificity

This ARHGEF4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 573-599 amino acids from the C-terminal region of human ARHGEF4.

## **Dilution**

WB~~1:1000

E~~Use at an assay dependent concentration.

#### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

### **Precautions**

ARHGEF4 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

# ARHGEF4 Antibody (C-term) - Protein Information

### Name ARHGEF4



## Synonyms KIAA1112

**Function** Acts as a guanine nucleotide exchange factor (GEF) for RHOA, RAC1 and CDC42 GTPases. Binding of APC may activate RAC1 GEF activity. The APC-ARHGEF4 complex seems to be involved in cell migration as well as in E-cadherin-mediated cell-cell adhesion. Required for MMP9 up- regulation via the JNK signaling pathway in colorectal tumor cells. Involved in tumor angiogenesis and may play a role in intestinal adenoma formation and tumor progression.

## **Cellular Location**

[Isoform 3]: Cytoplasm. Cell projection, ruffle membrane; Peripheral membrane protein; Cytoplasmic side. Note=Associated with membrane ruffles

### **Tissue Location**

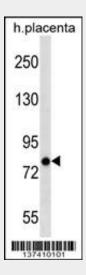
Expressed at high levels in the brain, skeletal muscle and testis and at low levels in the kidney, lung, small intestine, ovary and prostate. Expression is aberrantly enhanced in most colorectal tumors.

## **ARHGEF4 Antibody (C-term) - Protocols**

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

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

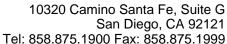
# **ARHGEF4 Antibody (C-term) - Images**



ARHGEF4 Antibody (C-term) (Cat. #AP18666b) western blot analysis in human placenta tissue lysates (35ug/lane). This demonstrates the ARHGEF4 antibody detected the ARHGEF4 protein (arrow).

## ARHGEF4 Antibody (C-term) - Background

Rho GTPases play a fundamental role in numerous cellular





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processes that are initiated by extracellular stimuli that work through G protein coupled receptors. The encoded protein may form complex with G proteins and stimulate Rho-dependent signals. This protein is similar to rat collybistin protein. Alternative splicing of this gene generates two transcript variants which encode different isoforms. Also there is possibility for the usage of multiple polyadenylation sites for this gene.

## ARHGEF4 Antibody (C-term) - References

Lyons, R., et al. Leuk. Res. 34(1):109-115(2010) Kawasaki, Y., et al. J. Biol. Chem. 284(33):22436-22443(2009) Itoh, R.E., et al. J. Cell. Sci. 121 (PT 16), 2635-2642 (2008) : Kurzik-Dumke, U., et al. Cell. Signal. 19(9):1973-1985(2007) Kuraguchi, M., et al. PLoS Genet. 2 (9), E146 (2006) :