

## **RGS1 Antibody (N-term)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP8758a

## Specification

# **RGS1** Antibody (N-term) - Product Information

Application Primary Accession	WB, FC,E
,	<u>Q08116</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	19-45

## **RGS1** Antibody (N-term) - Additional Information

#### Gene ID 5996

**Other Names** Regulator of G-protein signaling 1, RGS1, B-cell activation protein BL34, Early response protein 1R20, RGS1, 1R20, BL34, IER1

#### Target/Specificity

This RGS1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 19-45 amino acids from the N-terminal region of human RGS1.

**Dilution** WB~~1:1000 FC~~1:10~50

#### 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

RGS1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## **RGS1** Antibody (N-term) - Protein Information

Name RGS1

Synonyms 1R20, BL34, IER1



**Function** Regulates G protein-coupled receptor signaling cascades, including signaling downstream of the N-formylpeptide chemoattractant receptors and leukotriene receptors (PubMed:<u>10480894</u>). Inhibits B cell chemotaxis toward CXCL12 (By similarity). Inhibits signal transduction by increasing the GTPase activity of G protein alpha subunits thereby driving them into their inactive GDP-bound form (PubMed:<u>10480894</u>, PubMed:<u>18434541</u>).

**Cellular Location** 

Cell membrane; Peripheral membrane protein; Cytoplasmic side. Cytoplasm, cytosol

**Tissue Location** 

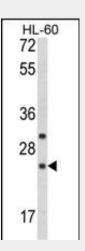
Detected in peripheral blood monocytes (PubMed:10480894). Expression is relatively low in B-cells and chronic lymphocytic leukemia B-cells; however, in other types of malignant B- cell such as non-Hodgkin lymphoma and hairy cell leukemia, expression is constitutively high (PubMed:8473738).

## **RGS1 Antibody (N-term) - Protocols**

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

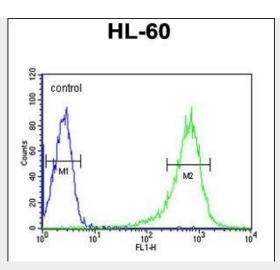
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

**RGS1 Antibody (N-term) - Images** 



Western blot analysis of RGS1 Antibody (N-term) (Cat. #AP8758a) in HL-60 cell line lysates (35ug/lane). RGS1 (arrow) was detected using the purified Pab.





RGS1 Antibody (N-term) (Cat. #AP8758a) flow cytometric analysis of HL-60 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

# RGS1 Antibody (N-term) - Background

RGS1 is a member of the regulator of G-protein signalling family. This protein is located on the cytosolic side of the plasma membrane and contains a conserved, 120 amino acid motif called the RGS domain. The protein attenuates the signalling activity of G-proteins by binding to activated, GTP-bound G alpha subunits and acting as a GTPase activating protein (GAP), increasing the rate of conversion of the GTP to GDP. This hydrolysis allows the G alpha subunits to bind G beta/gamma subunit heterodimers, forming inactive G-protein heterotrimers, thereby terminating the signal.

## **RGS1** Antibody (N-term) - References

Bowman, E.P., et.al., J. Biol. Chem. 273 (43), 28040-28048 (1998)