

## **RGS21 Antibody**

Catalog # ASC10918

### **Specification**

## **RGS21 Antibody - Product Information**

Application
Primary Accession
Other Accession
Reactivity
Host
Clonality

Isotype

**Application Notes** 

WB, ICC, IF O2M5E4

NP 001034241, 85540441

Human Rabbit Polyclonal

IgG

RGS21 antibody can be used for detection of RGS21 by Western blot at 0.5 µg/mL.

Antibody can also be used for

immunocytochemistry starting at 2.5 µg/mL. For immunofluorescence start at 20

μg/mL.

## **RGS21 Antibody - Additional Information**

Gene ID 431704

Target/Specificity

RGS21:

## **Reconstitution & Storage**

RGS21 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

## **Precautions**

RGS21 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

# **RGS21 Antibody - Protein Information**

#### Name RGS21

#### **Function**

Inhibits signal transduction by increasing the GTPase activity of G protein alpha subunits thereby driving them into their inactive GDP-bound form.

### **Tissue Location**

Expressed ubiquitously.

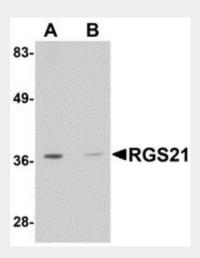
#### **RGS21 Antibody - Protocols**



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

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

## **RGS21 Antibody - Images**

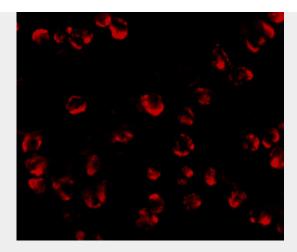


Western blot analysis of RGS21 in HepG2 cell lysate with RGS21 antibody at 0.5  $\mu$ g/mL in (A) the absence and (B) the presence of blocking peptide.



Immunocytochemistry of RGS21 in HepG2 cells with RGS21 antibody at 2.5 μg/mL.





Immunofluorescence of RGS21 in HepG2 cells with RGS21 antibody at 20 μg/mL.

## **RGS21 Antibody - Background**

RGS21 Antibody: Regulator of G-protein signaling (RGS) proteins contain an 120 amino acid conserved domain, termed the RGS domain, that acts as a GTPase-activating protein that acts to reduce the signal transmitted by the receptor-activated G-alpha subunit. RGS21 is a recently identified member of this family that has been reported to be selectively expressed in subpopulations of taste bud cells and co-expressed with bitter and sweet transduction components such as alpha-gusticin, phospholipase Cbeta2, T1R2/T1R3 sweet taste receptors and T2R bitter taste receptors. Other reports indicate that RGS21 is more widely expressed. Binding assays demonstrate that RGS21 binds alpha-gusticin in a conformation-dependent manner and may do the same with T1R receptors, suggesting that RGS21 may play a role in sweet and bitter taste transduction processes.

## **RGS21 Antibody - References**

De Vries L, Mousli M, Wurmser A, et al. GAIP, a protein that specifically interacts with the G protein G alpha i3, is a member of a protein family with a highly conserved core domain. Proc. Natl. Acad. Sci. USA1995; 92:11916-20.

Berman DM, Wilkie TM, and Gilman AG. GAIP and RGS4 are GTP-ase activating proteins for the Gi subfamily of G protein alpha subunits. Cell1996; 86:445-52.

von Bucholtz L, Elischer A, Tareilus E, et al. RGS21 is a novel regulator of G protein signalling selectively expressed in subpopulations of taste bud cells. Eur. J. Neurosci.2004; 19:1535-44. Li X, Chen L, Ji C, et al. Isolation and expression pattern of RGS21 gene, a novel RGS member. Acta Biochim. Pol.2005; 52:943-6.