

**RGS21 Antibody**  
**Catalog # ASC10918****Specification**

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**RGS21 Antibody - Product Information**

Application	WB, ICC, IF
Primary Accession	<a href="#">Q2M5E4</a>
Other Accession	<a href="#">NP_001034241</a> , <a href="#">85540441</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Application Notes	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**

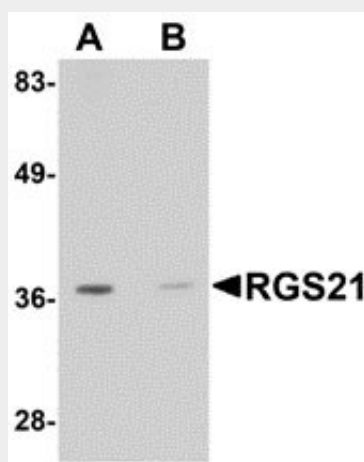
Expressed ubiquitously.

**RGS21 Antibody - Protocols**

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

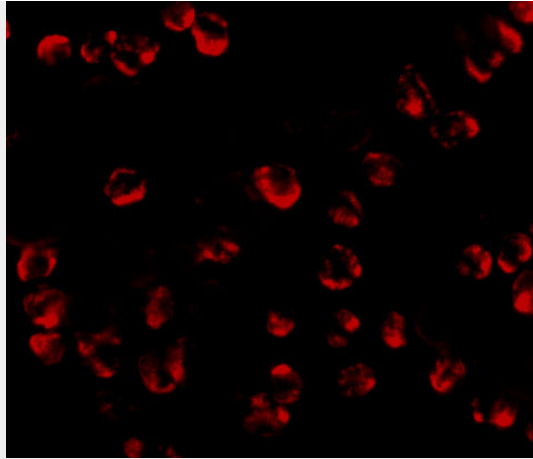
#### RGS21 Antibody - Images



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



Immunocytochemistry of RGS21 in HepG2 cells with RGS21 antibody at 2.5  $\mu\text{g/mL}$ .



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. USA*1995; 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. *Cell*1996; 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.