

For Research Use Only

# RGS1 Polyclonal antibody

Catalog Number: 12547-1-AP

Featured Product



## Basic Information

<b>Catalog Number:</b> 12547-1-AP	<b>GenBank Accession Number:</b> BC015510	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 150ul , Concentration: 600 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 5996	<b>Recommended Dilutions:</b> WB 1:500-1:1000 IHC 1:50-1:500
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> Q08116	
<b>Isotype:</b> IgG	<b>Full Name:</b> regulator of G-protein signaling 1	
<b>Immunogen Catalog Number:</b> AG3315	<b>Calculated MW:</b> 196 aa, 22 kDa	
	<b>Observed MW:</b> 30 kDa	

## Applications

**Tested Applications:**  
WB, IHC, ELISA

**Species Specificity:**  
human, mouse, rat

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

**Positive Controls:**

**WB :** HL-60 cells, mouse small intestine tissue, HepG2 cells, NK-92 cells, rat small intestine tissue

**IHC :** human stomach cancer tissue,

## Background Information

RGS1 (Regulator of G-protein signaling 1) is also named as 1R20, BL34 and IER1. RGS1 encodes a member of the regulator of G-protein signaling family, which can act as a GTPase-activating protein (GAP), increasing the rate of conversion of the GTP to GDP, driving G-protein into its inactive GDP-bound form, hence attenuating or turning off G-protein-coupled receptor signaling (PMID: 8774882). RGS1 is highly expressed in immune cells including T cells, B cells, natural killer (NK) cells, dendritic cells and monocytes, suggesting a role for RGS1 in immune cell regulation (PMID: 34956194). RGS1 was highly expressed in tumor tissues and correlated with shorter overall survival, which also appeared in several previous studies, including multiple myeloma, melanoma, nonsmall cell lung cancer, gastric cancer, diffuse large B-cell lymphoma (PMID: 34956194). RGS1 protein, located at the cytoplasm and membrane, is enriched in tumor tissues compared with normal tissues. RGS1 was identified as a HIF-dependent hypoxia target that dampens cell migration and signal transduction (PMID: 24686421).

## Storage

**Storage:**

Store at -20°C. Stable for one year after shipment.

**Storage Buffer:**

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

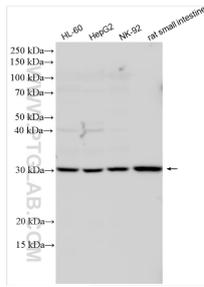
For technical support and original validation data for this product please contact:

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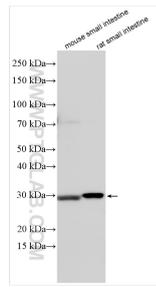
E: proteintech@ptglab.com  
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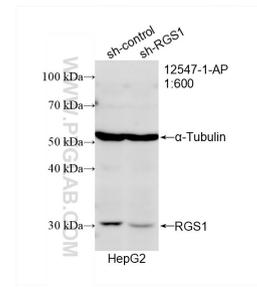
## Selected Validation Data



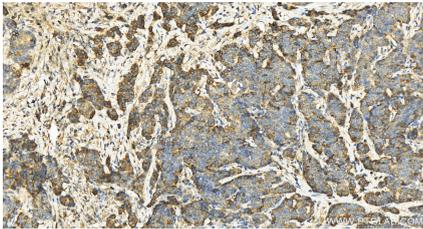
Various lysates were subjected to SDS PAGE followed by western blot with 12547-1-AP (RGS1 antibody) at dilution of 1:600 incubated at room temperature for 1.5 hours.



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WB result of RGS1 antibody (12547-1-AP; 1:600; incubated at room temperature for 1.5 hours) with sh-Control and sh-RGS1 transfected HepG2 cells.



Immunohistochemical analysis of paraffin-embedded human stomach cancer tissue slide using 12547-1-AP (RGS1 antibody) at dilution of 1:200 (under 20x lens). Heat mediated antigen retrieval with Sodium Citrate buffer (pH 6.0).