

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human RGS8 in direct ELISAs and Western blots. In direct ELISAs, less than 1% cross-reactivity with recombinant human RGS4 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human RGS8 Asn10-Thr76 Accession # P57771
Conjugate	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunohistochemistry	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

RGS8 (Regulator of G-protein signaling 8) is a 22-23 kDa (predicted) member of the B/R4 subfamily, RGS family of proteins. It is expressed in NK cells and neurons, particularly cerebellar Purkinje cells, and is known to regulate GPCR signaling. When GPCRs are activated, a GPCR cytoplasmic domain associated Gαβγ heterotrimer dissociates in response to GTP binding. This generates Gα:GTP and Gβγ dimers that initiate downstream signaling. Gα has GTPase activity, and when GTP is hydrolyzed, the Gαβγ trimer reforms and stops signaling. RGS8 potentiates Gα GTP hydrolase activity, particularly when associated with M1 muscarinic acetylcholine receptors. Human RGS8 is 180 amino acids (aa) in length, and is characterized by the presence of one RGS domain (aa 56-171), and an N-terminal GPCR binding motif (aa 6-9). There is one splice variant that shows a 27 aa substitution for aa 1-9. Expression of this variant may negatively impact its regulation of Gα-coupled responses. Over aa 10-76, human RGS8 shares 98% aa identity with mouse RGS8.

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