

# R9BP Antibody (N-term) Blocking peptide

Synthetic peptide Catalog # BP5703a

### **Specification**

### R9BP Antibody (N-term) Blocking peptide - Product Information

Primary Accession Q6ZS82
Other Accession NP\_997274.2

### R9BP Antibody (N-term) Blocking peptide - Additional Information

Gene ID 388531

#### **Other Names**

Regulator of G-protein signaling 9-binding protein, RGS9-anchoring protein, RGS9BP, R9AP

#### **Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

#### **Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

#### **Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

### R9BP Antibody (N-term) Blocking peptide - Protein Information

Name RGS9BP

**Synonyms** R9AP

#### **Function**

Regulator of G protein-coupled receptor (GPCR) signaling in phototransduction. Participates in the recovery phase of visual transduction via its interaction with RGS9-1 isoform. Acts as a membrane-anchor that mediates the targeting of RGS9-1 to the photoreceptor outer segment, where phototransduction takes place. Enhances the ability of RGS9-1 to stimulate G protein GTPase activity, allowing the visual signal to be terminated on the physiologically time scale. It also controls the proteolytic stability of RGS9-1, probably by protecting it from degradation (By similarity).

## **Cellular Location**

Membrane; Single-pass type IV membrane protein

#### R9BP Antibody (N-term) Blocking peptide - Protocols



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

### • Blocking Peptides

R9BP Antibody (N-term) Blocking peptide - Images

## R9BP Antibody (N-term) Blocking peptide - Background

RGS9BP functions as a regulator of G protein-coupled receptor signaling in phototransduction. Studies in bovine and mouse show that this gene is expressed only in the retina, and is localized in the rod outer segment membranes. This protein is associated with a heterotetrameric complex, specifically interacting with the regulator of G-protein signaling9, and appears to function as the membrane anchor for the other largely soluble interacting partners. Mutations in this gene areassociated with prolonged electroretinal response suppression (PERRS), also known as bradyopsia.

### R9BP Antibody (N-term) Blocking peptide - References

Cheng, J.Y., et al. Arch. Ophthalmol. 125(8):1138-1140(2007)Nishiguchi, K.M., et al. Nature 427(6969):75-78(2004)Hu, G., et al. J. Biol. Chem. 278(16):14550-14554(2003)Hu, G., et al. Proc. Natl. Acad. Sci. U.S.A. 99(15):9755-9760(2002)