

# **RGR Antibody (Center) Blocking Peptide**

Synthetic peptide Catalog # BP9895c

# **Specification**

# **RGR Antibody (Center) Blocking Peptide - Product Information**

Primary Accession

# RGR Antibody (Center) Blocking Peptide - Additional Information

**Gene ID 5995** 

#### **Other Names**

RPE-retinal G protein-coupled receptor, RGR

#### **Format**

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

P47804

#### 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.

### **RGR Antibody (Center) Blocking Peptide - Protein Information**

# Name RGR

### **Function**

Receptor for all-trans- and 11-cis-retinal. Binds preferentially to the former and may catalyze the isomerization of the chromophore by a retinochrome-like mechanism.

#### **Cellular Location**

Membrane; Multi-pass membrane protein.

# **Tissue Location**

Preferentially expressed at high levels in the retinal pigment epithelium (RPE) and Mueller cells of the neural retina

# **RGR Antibody (Center) Blocking Peptide - Protocols**

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

# • Blocking Peptides

# **RGR Antibody (Center) Blocking Peptide - Images**



# RGR Antibody (Center) Blocking Peptide - Background

This gene encodes a putative retinal G-protein coupled receptor. The gene is a member of the opsin subfamily of the 7 transmembrane, G-protein coupled receptor 1 family. Like other opsins which bind retinaldehyde, it contains a conserved lysine residue in the seventh transmembrane domain. The protein acts as a photoisomerase to catalyze the conversion of all-trans-retinal to 11-cis-retinal. The reverse isomerization occurs with rhodopsin in retinal photoreceptor cells. The protein is exclusively expressed in tissue adjacent to retinal photoreceptor cells, the retinal pigment epithelium and Mueller cells. This gene may be associated with autosomal recessive and autosomal dominant retinitis pigmentosa (arRP and adRP, respectively).

# **RGR Antibody (Center) Blocking Peptide - References**

Kochounian, H., et al. Exp. Eye Res. 88(6):1129-1136(2009)Radu, R.A., et al. J. Biol. Chem. 283(28):19730-19738(2008)Luttrell, L.M. Mol. Biotechnol. 39(3):239-264(2008)Lin, M.Y., et al. Mol. Vis. 13, 1203-1214 (2007)