
Product Name: RGR Rabbit Polyclonal Antibody**Catalog #: APRab17086**

For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	IHC,ICC/IF,ELISA
Reactivity	Human,Rat,Mouse
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio IHC 1:100-1:300,ICC/IF 1:200-1:1000,ELISA 1:5000-1:10000

Molecular Weight

Antigen Information

Gene Name	RGR
Alternative Names	RGR; RPE-retinal G protein-coupled receptor
Gene ID	5995.0
SwissProt ID	P47804
Immunogen	The antiserum was produced against synthesized peptide derived from human RGR. AA range:169-218

Background

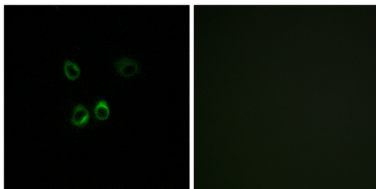
retinal G protein coupled receptor(RGR) Homo sapiens This gene encodes a putative retinal G-protein coupled receptor. The

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). Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Jul 2008],disease:Defects in RGR are a cause of retinitis pigmentosa autosomal recessive (ARRP) [MIM:268000]. RP leads to degeneration of retinal photoreceptor cells. Patients typically have night vision blindness and loss of midperipheral visual field. As their condition progresses, they lose their far peripheral visual field and eventually central vision as well.,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.,online information:Retina International's Scientific Newsletter,PTM:Covalently binds all-trans- and 11-cis-retinal.,similarity:Belongs to the G-protein coupled receptor 1 family. Opsin subfamily.,tissue specificity:Preferentially expressed at high levels in the retinal pigment epithelium (RPE) and Mueller cells of the neural retina.,

Research Area

Signal Transduction; Signaling Pathway; G Protein Signaling; GPCR; Neuroscience; Sensory System; Visual system; Neurotransmission; Receptors / Channels

Image Data



Immunofluorescence analysis of MCF7 cells, using RGR Antibody. The picture on the right is blocked with the synthesized peptide.