Best Tools for immunology Research

RGR Polyclonal Antibody

Catalog No :	YT4069
Reactivity :	Human;Rat;Mouse;
Applications :	IHC;IF;ELISA
Target :	RGR
Gene Name :	RGR
Protein Name :	RPE-retinal G protein-coupled receptor
Human Gene Id :	5995
Human Swiss Prot No :	P47804
Mouse Swiss Prot No :	Q9Z2B3
Immunogen :	The antiserum was produced against synthesized peptide derived from human RGR. AA range:169-218
Specificity :	RGR Polyclonal Antibody detects endogenous levels of RGR protein.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Polyclonal, Rabbit,IgG
Dilution :	IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:5000. Not yet tested in other applications.
Purification :	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Concentration :	1 mg/ml
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)
Molecularweight :	32kD

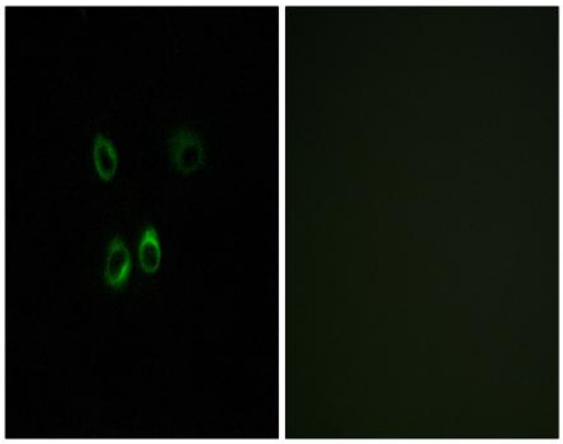
Background : retinal G protein coupled receptor(RGR) Homo sapiens This gene encodes a putative retinal G-protein coupled receptor. The gene is a member of the opsin subfamily of the 7 transmembrane, G-protein coupled receptor 1 family. Like other opsins which bind retinaldehyde, it contains a conserved 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],

Function : 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.,

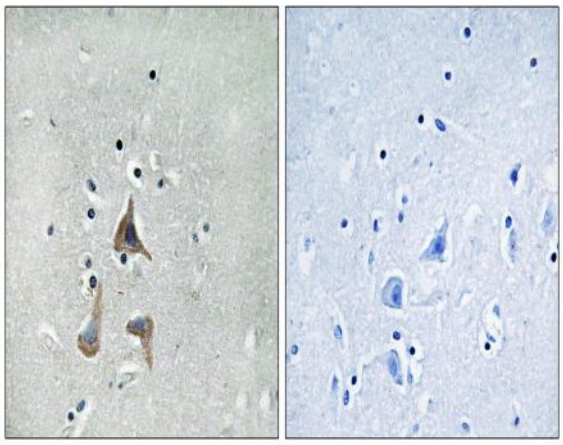
Subcellular Location : Membrane; Multi-pass membrane protein.

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

Products Images



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



Immunohistochemistry analysis of paraffin-embedded human brain tissue, using RGR Antibody. The picture on the right is blocked with the synthesized peptide.