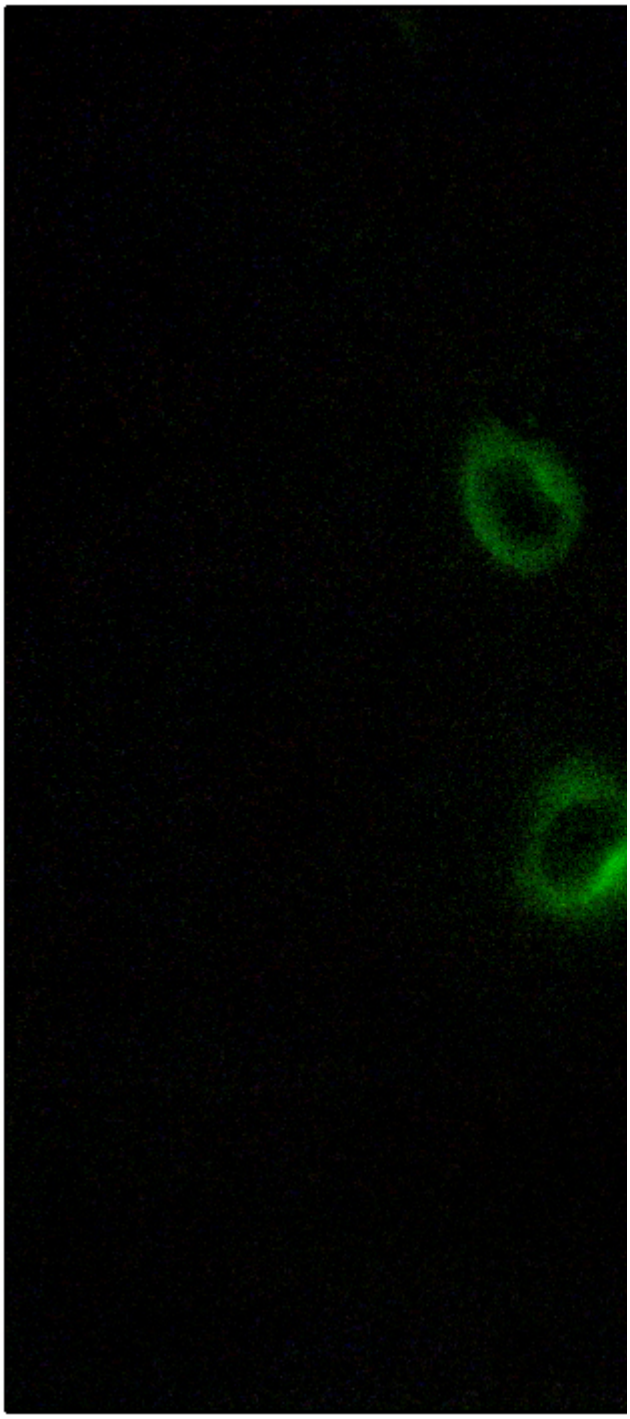
RGR Polyclonal Antibody

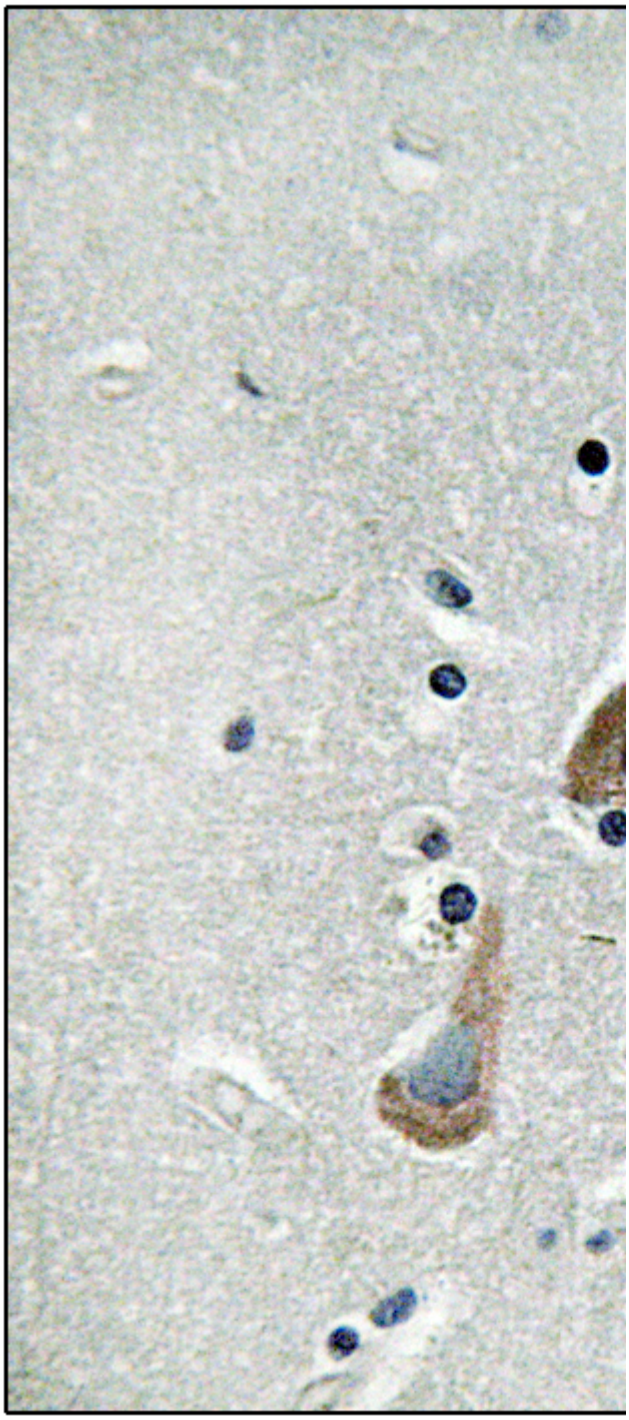
Catalog No	BYab-31853
Isotype	IgG
Reactivity	Human;Rat;Mouse;
Applications	IHC;IF;ELISA
Gene Name	RGR
Protein Name	RPE-retinal G protein-coupled receptor
Immunogen	The antiserum was produced against synthesized peptide derived from human RGR. AA range:169-218
Specificity	RGR Polyclonal Antibody detects endogenous levels of RGR protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/5000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	RGR; RPE-retinal G protein-coupled receptor
Observed Band	
Cell Pathway	Membrane; Multi-pass membrane protein.
Tissue Specificity	Preferentially expressed at high levels in the retinal pigment epithelium (RPE) and Mueller cells of the neural retina.
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.,

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],
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

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.