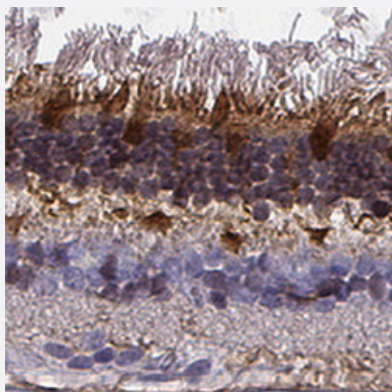


GUCA1A polyclonal antibody

Catalog # PAB31073

Size 100 uL

Applications



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemical staining of human retina shows strong cytoplasmic positivity in photoreceptor layer and outer plexiform layer.

Specification

Product Description	Rabbit polyclonal antibody raised against partial recombinant human GUCA1A.
Immunogen	Recombinant protein corresponding to human GUCA1A.
Sequence	EYVAALSLVLKKGKVEQKLRWYFKLYDVGNGCIDRDELLTIQAIRAINPCSDTTMTAEFTDTVFSK IDVNGDGELSLEEFIEGVQKDQMLLDLTRSLDLTRIVRRLQNGEQDEEGADEAAEAAG
Host	Rabbit
Reactivity	Human
Form	Liquid
Purification	Antigen affinity purification
Isotype	IgG
Recommend Usage	Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) (1:5000-10000) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS, pH 7.2 (40% glycerol, 0.02% sodium azide).

Storage Instruction

Store at 4°C. For long term storage store at -20°C.
Aliquot to avoid repeated freezing and thawing.

Note

This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemical staining of human retina shows strong cytoplasmic positivity in photoreceptor layer and outer plexiform layer.

Gene Info — GUCA1A

Entrez GeneID[2978](#)**Protein Accession#**[P43080](#)**Gene Name**

GUCA1A

Gene Alias

COD3, GCAP, GCAP1, GUCA, GUCA1

Gene Description

guanylate cyclase activator 1A (retina)

Omim ID[600364 602093](#)**Gene Ontology**[Hyperlink](#)**Gene Summary**

This gene plays a role in the recovery of retinal photoreceptors from photobleaching. In the recovery phase, the phototransduction messenger cGMP is replenished by retinal guanylyl cyclase-1 (GC1). GC1 is activated by decreasing Ca(2+) concentrations following photobleaching. The protein encoded by this gene, guanylyl cyclase activating protein 1 (GCAP1), mediates the sensitivity of GC1 to Ca(2+) concentrations. GCAP1 promotes activity of GC1 at low Ca(2+) concentrations and inhibits GC1 activity at high Ca(2+) concentrations. Mutations in this gene cause autosomal dominant cone dystrophy (COD3); a disease characterized by reduced visual acuity associated with progressive loss of color vision. Mutations in this gene prohibit the inactivation of RetGC1 at high Ca(2+) concentrations; causing the constitutive activation of RetGC1 and, presumably, increased cell death. This gene is expressed in retina and spermatagonia. [provided by RefSeq]

Other Designations

OTTHUMP00000016397|OTTHUMP00000196466

Pathway

- [Olfactory transduction](#)

Disease

- [Retinal Degeneration](#)
- [Retinal Diseases](#)