

# GUCA1A rabbit monoclonal antibody

Catalog # H00002978-K

Size 100 ug x up to 3

## Specification

<b>Product Description</b>	Rabbit monoclonal antibody raised against a human GUCA1A peptide using ARM Technology.
<b>Immunogen</b>	A synthetic peptide of human GUCA1A is used for rabbit immunization. Customer or Abnova will decide on the preferred peptide sequence.
<b>Host</b>	Rabbit
<b>Library Construction</b>	Non-fusion antibody library from rabbit spleen ( <a href="#">ARM Technology</a> ).
<b>Expression</b>	Overexpression vector and transfection into 293H cell line.
<b>Reactivity</b>	Human
<b>Purification</b>	Protein A
<b>Isotype</b>	IgG
<b>Quality Control Testing</b>	Antibody reactive against human GUCA1A peptide by ELISA and mammalian transfected lysate by Western Blot.
<b>Storage Buffer</b>	In 1x PBS, pH 7.4
<b>Storage Instruction</b>	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
<b>Deliverable</b>	Up to three rabbit IgG clones of 100 ug each will be delivered to customer.
<b>Note</b>	1. Customer may provide cell or tissue lysate for antibody screening. 2. Rabbit monoclonal antibody generated by ARM technology is amenable to antibody engineering including F(ab) <sub>2</sub> , IgG, scFv and different Fc and non-Fc conjugates per customer request.

## Applications

- Western Blot (Transfected lysate)

[Protocol Download](#)

- ELISA

## Gene Info — GUCA1A

Entrez GeneID [2978](#)

GeneBank Accession# [GUCA1A](#)

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](#)