

Recombinant Full Length Human GUCA1A Protein, GST-tagged

Cat. No. GUCA1A-3340HF **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Human GUCA1A full-length ORF (AAH31663, 1 a.a. - 201 a.a.) recombinant protein with GST-tag at N-terminal.
Species	Human
Source	In Vitro Cell Free System
ProteinLength	201 amino acids
Description	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
Molecular Mass	47.85 kDa

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

AA Sequence	MGNVMEGKSVEELSSTECHQWYKKFMTECPGQLTYEFRQFFGLKNLSPSASQY VEQMFETFDNFNDGYIDFMEYVAALSLVLKKGVEQKLRWYFKLYDVDGNGCIDRDE LLTIIQAIRAINPCSDTTMTAEFTDTVFSKIDVNGDGELSLEEFIEGVQKDQMLLDTLT RSLDLTRIVRRLQNGEQDEEGADEAAEAAG
Applications	Enzyme-linked Immunoabsorbent Assay Western Blot (Recombinant protein) Antibody Production Protein Array
Notes	Best use within three months from the date of receipt of this protein.
Storage	Store at -8 centigrade. Aliquot to avoid repeated freezing and thawing.
Storage Buffer	50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.
GENE INFORMATION	
Gene Name	GUCA1A guanylate cyclase activator 1A (retina) [Homo sapiens]
Official Symbol	GUCA1A
Synonyms	GUCA1A; guanylate cyclase activator 1A (retina); C6orf131, chromosome 6 open reading frame 131 , GUCA, GUCA1; guanylyl cyclase-activating protein 1; COD3; cone dystrophy 3; dJ139D8.6; GCAP; GCAP1; GCAP 1; guanylin 1, retina; guanylate cyclase-activating protein, photoreceptor 1; GUCA; GUCA1; CORD14; C6orf131;
Gene ID	2978
mRNA Refseq	NM_000409

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Protein Refseq	NP_000400
MIM	600364
UniProt ID	P43080

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