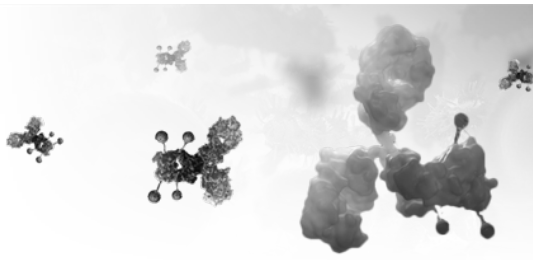

Anti-GUCA1A (aa 1-93) polyclonal antibody (DPAB-DC1508)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Antigen Description	This gene plays a role in the recovery of retinal photoreceptors from photobleaching. In the recovery phase, the phototransduction messeneger 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.
Immunogen	GUCA1A (NP_000400, 1 a.a. ~ 93 a.a) partial recombinant protein with GST tag. The sequence is MGNVMEGKSVEELSSTECHQWYKKFMTECPSGQLTLYEFRQFFGLKNLSPSASQYVEQMF ETFDFNKDGYIDFMEYVAALSLVLKGKVEQKLR
Source/Host	Mouse
Species Reactivity	Human
Conjugate	Unconjugated
Applications	WB (Recombinant protein), ELISA,
Size	50 µl
Buffer	50 % glycerol
Preservative	None

45-1 Ramsey Road, Shirley, NY 11967, USA
Email: info@creative-diagnostics.com
Tel: 1-631-624-4882 Fax: 1-631-938-8221

Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

GENE INFORMATION

Gene Name	GUCA1A guanylate cyclase activator 1A (retina) [Homo sapiens (human)]
Official Symbol	GUCA1A
Synonyms	GUCA1A; guanylate cyclase activator 1A (retina); COD3; GCAP; GUCA; GCAP1; GUCA1; CORD14; C6orf131; dJ139D8.6; guanylyl cyclase-activating protein 1; GCAP 1; cone dystrophy 3; guanylin 1, retina; guanylate cyclase-activating protein, photoreceptor 1;
Entrez Gene ID	2978
Protein Refseq	NP_000400
UniProt ID	P43080
Chromosome Location	6p21.1
Pathway	Disease; Inactivation, recovery and regulation of the phototransduction cascade; Olfactory transduction; Phototransduction
Function	calcium ion binding; calcium sensitive guanylate cyclase activator activity;

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