

GCAP3 Rabbit pAb

Catalog # AP96245

Product Information

Application	WB
Primary Accession	O95843
Other Accession	O95843
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	23822
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human GCAP3
Epitope Specificity	141-209/209
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Contains 4 EF-hand domains.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	The intracellular stimulation of guanylate cyclase (GC) by calcium, a key event in the recovery of the dark state of rod photoreceptors after exposure to light, is mediated by guanylate cyclase-activating proteins (GCAP). GCAPs are calcium-binding proteins belonging to the calmodulin superfamily and are specifically expressed in retina. GCAP3 (Guanylyl cyclase-activating protein 3), also known as GUCA1C (Guanylate cyclase activator 1C), is a 209 amino acid EF-hand calcium binding protein that is activated by the decrease in calcium from the absorption of light by rhodopsin. Activation of GCAP3 leads to stimulation of guanylate cyclase 1 and 2 (GC1 and GC2), which increases cGMP concentration. Calcium sensitive regulation of GC is essential in recovery of the rod receptor dark state following light exposure. There are two isoforms of GCAP3 that are produced as a result of alternative splicing events.

Additional Information

Gene ID	9626
Other Names	GUC1C_HUMAN; GUCA1C; GCAP 3; Guanylate cyclase activator 1C; GCAP3; guanylyl cyclase-activating protein 3
Target/Specificity	Retina.
Dilution	WB=1:500-2000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody

is stable for at least two weeks at 2-4 °C.

Protein Information

Name	GUCA1C
Synonyms	GCAP3
Function	Stimulates guanylyl cyclase 1 (GC1) and GC2 when free calcium ions concentration is low and inhibits guanylyl cyclases when free calcium ions concentration is elevated. This Ca(2+)-sensitive regulation of guanylyl cyclase (GC) is a key event in recovery of the dark state of rod photoreceptors following light exposure.
Tissue Location	Retina.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.