



Rabbit Anti-GCAP3 antibody

SL13308R

Product Name:	GCAP3
Chinese Name:	鸟苷酸环化酶激活蛋白3抗体
Alias:	GCAP 3; Guanylate cyclase activating photoreceptor 3; Guanylate cyclase activator 1C; Guanylyl cyclase activating protein 3; Guanylyl cyclase-activating protein 3; GUC1C_HUMAN; GUCA1C.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	24kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human GCAP3:141-209/209
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. 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.
PubMed:	PubMed
Product Detail:	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.

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 Specificity:

Retina.

Similarity:

Contains 4 EF-hand domains.

SWISS:

O95843

Gene ID:

9626

Database links:

[Entrez Gene: 9626](#)Human

[Omim: 605128](#)Human

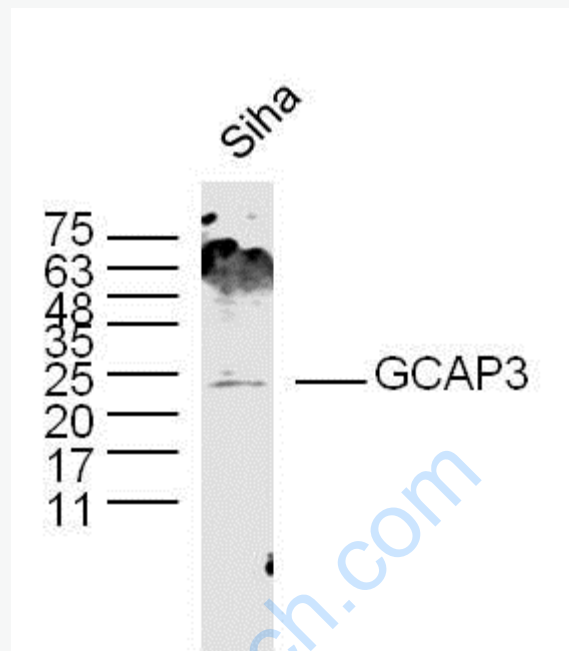
[SwissProt: O95843](#)Human

[Unigene: 233363](#)Human

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Picture:



Sample:

Siha Cell (Human) Lysate at 30 ug

Primary: Anti- GCAP3 (SL13308R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 24kD

Observed band size: 24kD