

Datasheet for ABIN5531246
anti-GCAP1 antibody (C-Term)[Go to Product page](#)

2 Images

Overview

Quantity:	400 µL
Target:	GCAP1 (GUCA1A)
Binding Specificity:	AA 160-191, C-Term
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This GCAP1 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))

Product Details

Immunogen:	This GCAP1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 160-191 amino acids from the C-terminal region of human GCAP1.
Isotype:	Ig Fraction
Purification:	This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis

Target Details

Target:	GCAP1 (GUCA1A)
Alternative Name:	GCAP1 (GUCA1A Products)
Background:	Guanylate cyclase-activating protein is a Ca^{2+} -binding protein that upregulates synthesis of cGMP in photoreceptors. The known mammalian GCAPs are more than 90 % similar, consisting

Target Details

of 201 to 205 amino acids, and containing 3 identically conserved Ca(2+)-binding sites. The GUCA1A gene, also termed GCAP1, is transcribed into a single 1.7-kb mRNA species detectable only in the retina. In a 4-generation British family with typical clinical features of autosomal dominant cone dystrophy a tyr99-to-cys mutation) in the GUCA1A gene has been identified. Another family with a pro50-to-leu mutation in GUCA1A demonstrated phenotypic variability ranging from mild photophobia to rod-cone dystrophy. The mutant protein could activate guanylate cyclase 1 (GUCY2D) and displayed similar calcium sensitivity to wildtype protein. However, there was a marked increase in the susceptibility to protease degradation and a reduction in the thermal stability of the pro50-to-leu mutation, which may depress cellular concentration and thereby contribute to retinal cell mortality.

Molecular Weight: 23 kDa

Gene ID: 2978

UniProt: [P43080](#)

Pathways: [Regulation of G-Protein Coupled Receptor Protein Signaling](#), [Phototransduction](#)

Application Details

Application Notes: For WB starting dilution is: 1:1000

For IHC-P starting dilution is: 1:50~100

Restrictions: For Research Use only

Handling

Format: Liquid

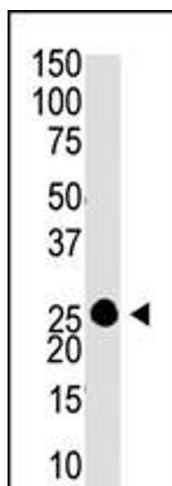
Buffer: Supplied in PBS with 0.09 % (W/V) sodium azide.

Preservative: Sodium azide

Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

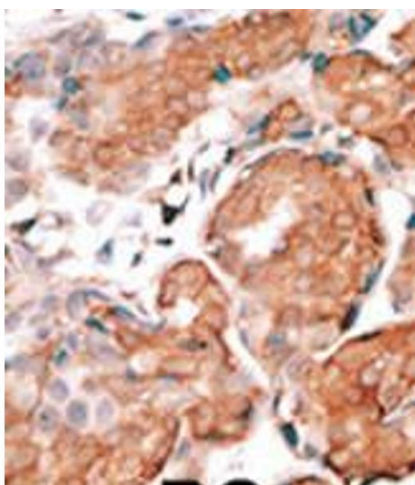
Storage: 4 °C, -20 °C

Storage Comment: Store at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.



Western Blotting

Image 1. Antibody is used in Western blot to detect GCAP1 in Y79 cell lysate.



Immunohistochemistry

Image 2. Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. BC = breast carcinoma; HC = hepatocarcinoma.