

## Product datasheet

# Anti-GCAP1 antibody [G2] ab5420

1 References 1 图像

### 概述

<b>产品名称</b>	Anti-GCAP1抗体[G2]
<b>描述</b>	小鼠单克隆抗体[G2] to GCAP1
<b>宿主</b>	Mouse
<b>特异性</b>	This antibody is specific for GCAP 1 and does not react with other isotypes.
<b>经测试应用</b>	<b>适用于:</b> IP, Inhibition Assay, WB
<b>种属反应性</b>	<b>与反应:</b> Cow, Human, Non human primates
<b>免疫原</b>	Other Immunogen Type corresponding to GCAP1. Bacterial expressed full length GCAP1.
<b>阳性对照</b>	WB: bovine rod outer segment membranes.

### 性能

<b>形式</b>	Liquid
<b>存放说明</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
<b>存储溶液</b>	Preservative: 0.05% Sodium azide Constituents: 99% PBS, 0.1% BSA
<b>纯度</b>	Protein A purified
<b>Primary antibody说明</b>	Guanylate cyclase-activating proteins (GCAPs) are calcium binding proteins that belong to the calmodulin superfamily. GCAPs without calcium are responsible for activation of photoreceptor guanylate cyclase during light adaptation. Studies have shown that the addition or subtraction of Ca <sup>2+</sup> results in major conformational changes and the activation/deactivation of GCAP 1 and GCAP 2. It has been demonstrated that both GCAP 1 and 2 act on guanylate cyclase similarly and have approximately 50% homology between the two forms. GCAP 1 (GenBank AF172707) is predominantly localized in the photoreceptor outer segments, while GCAP 2 is found in retina samples.
<b>克隆</b>	单克隆
<b>克隆编号</b>	G2
<b>同种型</b>	IgG2a

### 应用

Our [Abpromise guarantee](#) covers the use of **ab5420** in the following tested applications.

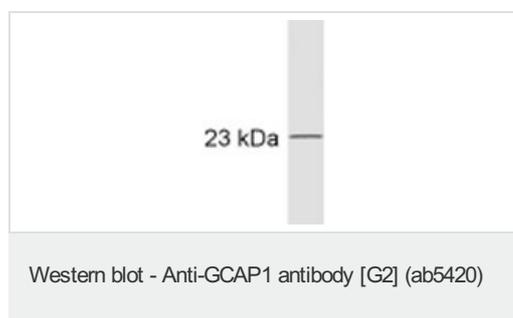
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

应用	Ab评论	说明
IP		Use at an assay dependent concentration.
Inhibition Assay		Use at an assay dependent concentration.
WB		Use a concentration of 1 µg/ml. Detects a band of approximately 23 kDa.

## 靶标

功能	Stimulates guanylyl cyclase 1 (GC1) when free calcium ions concentration is low and inhibits GC1 when free calcium ions concentration is elevated. This Ca(2+)-sensitive regulation of GC is a key event in recovery of the dark state of rod photoreceptors following light exposure.
组织特异性	Retina; cone outer and inner segments, in particular, in disk membrane regions, and to a lesser extent rod inner and outer segments.
疾病相关	Defects in GUCA1A are the cause of cone dystrophy type 3 (COD3) [MIM:602093]. COD3 is an autosomal dominant cone dystrophy. Cone dystrophies are retinal dystrophies characterized by progressive degeneration of the cone photoreceptors with preservation of rod function, as indicated by electroretinogram. However, some rod involvement may be present in some cone dystrophies, particularly at late stage. Affected individuals suffer from photophobia, loss of visual acuity, color vision and central visual field. Another sign is the absence of macular lesions for many years. Cone dystrophies are distinguished from the cone-rod dystrophies, in which some loss of peripheral vision also occurs.
序列相似性	Contains 4 EF-hand domains.
细胞定位	Membrane.

## 图片



Western blot of GCAP 1 on bovine rod outer segment lysate using ab5420.

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