

Anti-Rhodopsin antibody [Rho 4D2] ab98887

★★★★★ [3 Abreviews](#) [38 References](#) [4 图像](#)

概述

产品名称	Anti-Rhodopsin抗体[Rho 4D2]
描述	小鼠单克隆抗体[Rho 4D2] to Rhodopsin
宿主	Mouse
经测试应用	适用于: Flow Cyt, ELISA, ICC, IHC-P, IHC-Fr, IP, WB
种属反应性	与反应: Mouse, Rat, Cow, Human, Pig, Xenopus laevis 不与反应: Drosophila melanogaster
免疫原	Recombinant fragment corresponding to Bovine Rhodopsin (N terminal). Database link: P02699
阳性对照	Flow Cyt: Y79 cells. IHC-Fr: Mouse retina tissue. WB: A549 cell lysate. Bovine photoreceptor membrane tissue lysate.
常规说明	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

性能

形式	Liquid
存放说明	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid repeated freeze / thaw cycles.
存储溶液	Preservative: 0.09% Sodium azide Constituents: 50% Glycerol, PBS
纯度	Protein G purified
克隆	单克隆
克隆编号	Rho 4D2
同种型	IgG1

应用

The Abpromise guarantee

Abpromise™ 承诺保证使用 ab98887 于以下的经测试应用

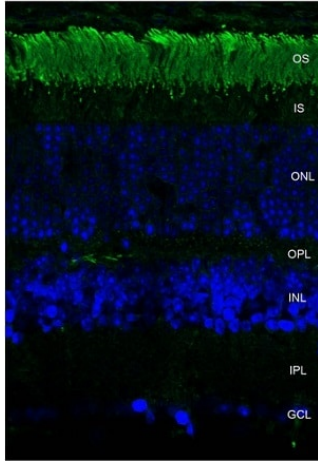
“应用说明”部分下显示的仅为推荐的起始稀释度；实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
Flow Cyt		Use 1µg for 10 ⁶ cells. ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.
ELISA		Use at an assay dependent concentration.
ICC		Use at an assay dependent concentration.
IHC-P		Use at an assay dependent concentration.
IHC-Fr		Use at an assay dependent concentration.
IP		Use at an assay dependent concentration. 1-2 ug per 100-500ug of protein.
WB	★★★★★ (2)	1/1000. Predicted molecular weight: 38 kDa.

靶标

功能	Photoreceptor required for image-forming vision at low light intensity. Required for photoreceptor cell viability after birth. Light-induced isomerization of 11-cis to all-trans retinal triggers a conformational change leading to G-protein activation and release of all-trans retinal.
组织特异性	Rod shaped photoreceptor cells which mediates vision in dim light.
疾病相关	Retinitis pigmentosa 4 Night blindness, congenital stationary, autosomal dominant 1
序列相似性	Belongs to the G-protein coupled receptor 1 family. Opsin subfamily.
翻译后修饰	Phosphorylated on some or all of the serine and threonine residues present in the C-terminal region. Contains one covalently linked retinal chromophore.
细胞定位	Membrane. Synthesized in the inner segment (IS) of rod photoreceptor cells before vectorial transport to the rod outer segment (OS) photosensory cilia.

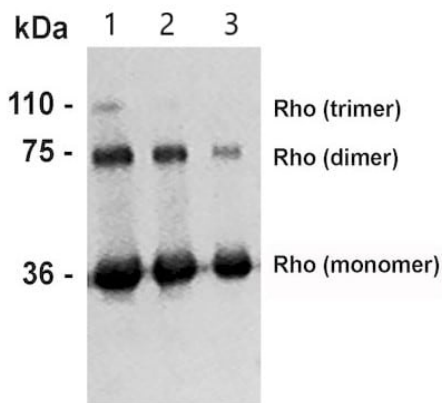
图片



Immunohistochemistry (Frozen sections) - Anti-Rhodopsin antibody [Rho 4D2] (ab98887)

Immunohistochemistry analysis staining Rhodopsin in mouse retina with ab98887 at 1/1000 dilution. Secondary Antibody: FITC Goat Anti-Mouse (green). Counterstain: DAPI (blue) nuclear stain.

OS - photoreceptor outer segment; IS – inner segment; ONL – outer nuclear layer; OPL – outer plexiform layer; INL – inner nuclear layer; IPL – inner plexiform layer; GCL – ganglion cell layer.



Western blot - Anti-Rhodopsin antibody [Rho 4D2] (ab98887)

All lanes : Anti-Rhodopsin antibody [Rho 4D2] (ab98887) at 1/1000 dilution

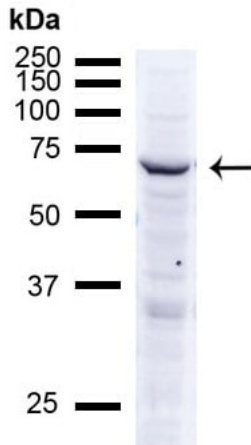
Lane 1 : Bovine photoreceptor membrane tissue lysate at 10 µg

Lane 2 : Bovine photoreceptor membrane tissue lysate at 5 µg

Lane 3 : Bovine photoreceptor membrane tissue lysate at 2.5 µg

Predicted band size: 38 kDa

Observed band size: 110,35,75 kDa



Western blot - Anti-Rhodopsin antibody [Rho 4D2] (ab98887)

Anti-Rhodopsin antibody [Rho 4D2] (ab98887) at 1/1000 dilution (2.5 hours at room temperature with shaking) + A549 (human lung carcinoma cell line) whole cell lysate at 15 μ g

Secondary

Goat Anti-Mouse IgG (HRP) for 1 hour at room temperature with shaking at 1/1000 dilution

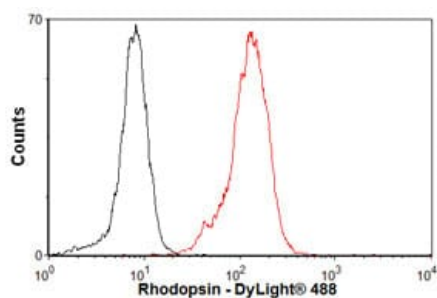
Predicted band size: 38 kDa

Observed band size: 75 kDa

Band appears at ~75 kDa indicating detection of the Rhodopsin dimer.

Block: 5% Skim Milk Powder in TBST.

Color Development: Chemiluminescent for HRP for 5 min at room temperature.



Flow Cytometry - Anti-Rhodopsin antibody [Rho 4D2] (ab98887)

Overlay histogram showing Y79 (Human retinoblastoma cell line) cells stained with ab98887 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab98887, 1 μ g/1x10⁶ cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (ab96879) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] (ab91353, 2 μ g/1x10⁶ cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a positive signal in Y79 cells fixed with 4% paraformaldehyde (10 min)/permeabilized with 0.1% PBS-Tween for 20 min used under the same conditions.

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