abcam

Product datasheet

Anti-Rhodopsin antibody [Rho 4D2] ab98887

★★★★★ 3 Abreviews 38 References 画像数 4

製品の概要

製品名 Anti-Rhodopsin antibody [Rho 4D2]

製品の詳細 Mouse monoclonal [Rho 4D2] to Rhodopsin

由来種 Mouse

アプリケーション 適用あり: Flow Cyt, ELISA, ICC, IHC-P, IHC-Fr, IP, WB

種交差性 交差種: Mouse, Rat, Cow, Human, Pig, Xenopus laevis

非交差種: Drosophila melanogaster

免疫原 Recombinant fragment corresponding to Bovine Rhodopsin (N terminal).

Database link: P02699

ポジティブ・コントロール Flow Cyt: Y79 cells. IHC-Fr: Mouse retina tissue. WB: A549 cell lysate. Bovine photoreceptor

membrane tissue lysate.

特記事項

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.

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

製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid repeated freeze / thaw cycles.

ארע"א Preservative: 0.09% Sodium azide

Constituents: 50% Glycerol, PBS

精製度 Protein G purified

ポリ/モノ モノクローナル

クローン名 Rho 4D2

アイソタイプ lgG1

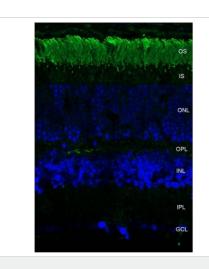
The Abpromise guarantee Abpromise保証は、次のテスト済みアプリケーションにおけるab98887の使用に適用されます アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
Flow Cyt		Use 1µg for 10 ⁶ cells. ab170190 - Mouse monoclonal lgG1, 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.

ターゲット情報

機能	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.
組織特異性	Rod shaped photoreceptor cells which mediates vision in dim light.
関連疾患	Retinitis pigmentosa 4 Night blindness, congenital stationary, autosomal dominant 1
配列類似性	Belongs to the G-protein coupled receptor 1 family. Opsin subfamily.
翻訳後修飾	Phosphorylated on some or all of the serine and threonine residues present in the C-terminal region. Contains one covalently linked retinal chromophore.
細胞内局在	Membrane. Synthesized in the inner segment (IS) of rod photoreceptor cells before vectorial transport to the rod outer segment (OS) photosensory cilia.

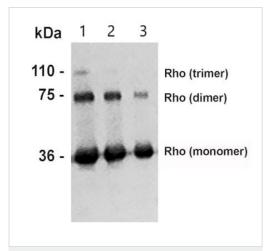
画像



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.

 $\label{eq:os-photoreceptor} OS - photoreceptor outer segment; IS - inner segment; ONL - outer nuclear layer; OPL - outer plexiform layer; INL - inner nuclear layer; IPL - inner plexiform layer; GCL - ganglion cell layer.$



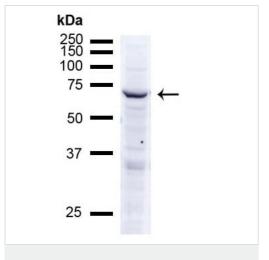
Western blot - Anti-Rhodopsin antibody [Rho 4D2] (ab98887)

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

Lane 1 : Bovine photoreceptor membrane tissue lysate at 10 μ g **Lane 2 :** Bovine photoreceptor membrane tissue lysate at 5 μ g **Lane 3 :** Bovine photoreceptor membrane tissue lysate at 2.5 μ g

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.

70 Counts

100 102 102 102 103 103 104

Rhodopsin - DyLight® 488

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, 1µg/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, 2µg/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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