abcam

Product datasheet

Anti-ABCA4 antibody ab72955

4 References 1 图像

概述

产**品名称** Anti-ABCA4抗体

描述 兔多克隆抗体to ABCA4

宿主 Rabbit

经测试应用 适用于: WB

种属反应性 与反应: Mouse, Human

免疫原 Synthetic peptide corresponding to Human ABCA4 aa 2250 to the C-terminus (C terminal)

conjugated to keyhole limpet haemocyanin.

(Peptide available as ab87350)

阳性对照 This antibody gave a positive signal in Human and Mouse Retina Tissue lysates.

常规说明

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

性能

形式 Liquid

存放说明 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.

存储溶液 pH: 7.40

Preservative: 0.02% Sodium azide

Constituent: PBS

Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising

agent. If you would like information about the formulation of a specific lot, please contact our

scientific support team who will be happy to help.

纯**度** Immunogen affinity purified

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克隆 多克隆

同种型 lgG

应用

The Abpromise guarantee

Abpromise™承诺保证使用ab72955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
WB		Use a concentration of 1 µg/ml. Detects a band of approximately 238 kDa (predicted molecular weight: 256 kDa).

靶标

功能

组织特异性 疾病相关

In the visual cycle, acts as an inward-directed retinoid flipase, retinoid substrates imported by ABCA4 from the extracellular or intradiscal (rod) membrane surfaces to the cytoplasmic membrane surface are all-trans-retinaldehyde (ATR) and N-retinyl-phosphatidyl-ethanolamine (NR-PE). Once transported to the cytoplasmic surface, ATR is reduced to vitamin A by transretinol dehydrogenase (tRDH) and then transferred to the retinal pigment epithelium (RPE) where it is converted to 11-cis-retinal. May play a role in photoresponse, removing ATR/NR-PE from the extracellular photoreceptor surfaces during bleach recovery.

Retinal-specific. Seems to be exclusively found in the rims of rod photoreceptor cells.

Defects in ABCA4 are the cause of Stargardt disease type 1 (STGD1) [MIM:248200]. STGD is one of the most frequent causes of macular degeneration in childhood. It is characterized by macular dystrophy with juvenile-onset, rapidly progressive course, alterations of the peripheral retina, and subretinal deposition of lipofuscin-like material. STGD1 inheritance is autosomal recessive.

Defects in ABCA4 are the cause of fundus flavimaculatus (FFM) [MIM:248200]. FFM is an autosomal recessive retinal disorder very similar to Stargardt disease. In contrast to Stargardt disease, FFM is characterized by later onset and slowly progressive course.

Defects in ABCA4 may be a cause of age-related macular degeneration type 2 (ARMD2) [MIM:153800]. ARMD is a multifactorial eye disease and the most common cause of irreversible vision loss in the developed world. In most patients, the disease is manifest as ophthalmoscopically visible yellowish accumulations of protein and lipid (known as drusen) that lie beneath the retinal pigment epithelium and within an elastin-containing structure known as Bruch membrane.

Defects in ABCA4 are the cause of cone-rod dystrophy type 3 (CORD3) [MIM:604116]. CORDs are inherited retinal dystrophies belonging to the group of pigmentary retinopathies. CORDs are characterized by retinal pigment deposits visible on fundus examination, predominantly in the macular region, and initial loss of cone photoreceptors followed by rod degeneration. This leads to decreased visual acuity and sensitivity in the central visual field, followed by loss of peripheral vision. Severe loss of vision occurs earlier than in retinitis pigmentosa.

Defects in ABCA4 are the cause of retinitis pigmentosa type 19 (RP19) [MIM:601718]. RP leads to degeneration of retinal photoreceptor cells. Patients typically have night vision blindness and loss of midperipheral visual field. As their condition progresses, they lose their far peripheral visual field and eventually central vision as well. RP19 is characterized by choroidal atrophy. Inheritance is autosomal recessive.

序列相似性

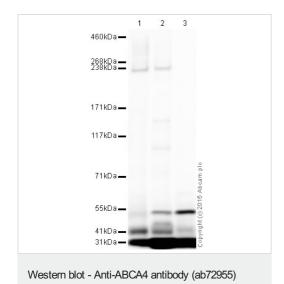
Belongs to the ABC transporter superfamily. ABCA family.

Contains 2 ABC transporter domains.

细胞定位

Membrane. Localized to outer segment disk edges of rods and cones, with around one million copies/photoreceptor.

图片



All lanes: Anti-ABCA4 antibody (ab72955) at 1 µg/ml

Lane 1: Eye (Human) - adult normal Tissue Lysate

Lane 2 : Retina (Mouse) Tissue Lysate

Lane 3: Retina (Rat) Tissue Lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit lgG H&L (HRP) preadsorbed at 1/50000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 256 kDa **Observed band size:** 235 kDa

Additional bands at: 31 kDa, 41 kDa, 55 kDa. We are unsure as

to the identity of these extra bands.

Exposure time: 8 minutes

This blot was produced using a 3-8% Tris Acetate gel under the TA buffer system. The gel was run at 150V for 60 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes. The membrane was then blocked for an hour using 2% Bovine Serum Albumin before being incubated with ab72955 overnight at 4°C. Antibody binding was detected using an anti-rabbit antibody conjugated to HRP, and visualised using ECL development solution ab133406.

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