abcam

Product datasheet

Anti-ABCA4 antibody [3F4] ab77285

3 References 画像数 2

製品の概要

製品名	Anti-ABCA4 antibody [3F4]
製品の詳細	Mouse monoclonal [3F4] to ABCA4
由来種	Mouse
アプリケーション	**適用あり:** IHC-FoFr, WB, IHC-P
種交差性	**交差種:** Mouse, Rat, Cow, Human, Xenopus laevis
免疫原	Full length native protein (purified) corresponding to Cow ABCA4. 220 kDa
エピトープ	Epitope has been mapped to aa 2252 – 2262 bovine ABCA4 protein, see Pubmed 9092582
ポジティブ・コントロール	Adult mouse retina tissue.
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.
バッファー	pH: 7.50 Constituents: 0.01% BSA, 50% Glycerol, 0.87% Sodium chloride, 0.238% HEPES
精製度	Protein G purified
特記事項（精製）	ab77285 is protein G purified from culture supernatant.
ポリ/モノ	モノクローナル
クローン名	3F4
アイソタイプ	IgG

アプリケーション

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ab77285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
IHC-FoFr		Use at an assay dependent concentration. PubMed: 20436469
WB		1/1000. Predicted molecular weight: 257 kDa.
IHC-P		1/100.

ターゲット情報

機能

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 trans-retinol 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.

組織特異性

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

関連疾患

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.

配列類似性

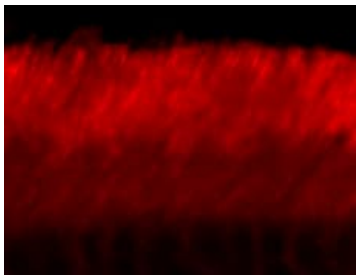
Belongs to the ABC transporter superfamily. ABCA family.
Contains 2 ABC transporter domains.

細胞内局在

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

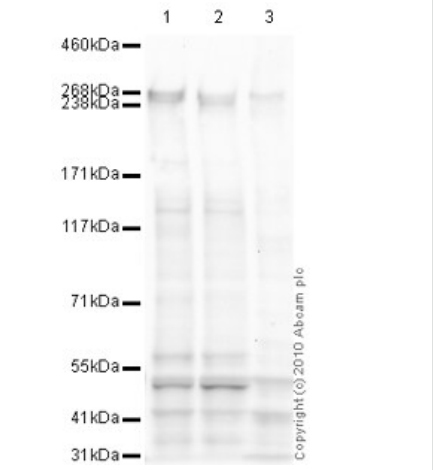
copies/photoreceptor.

画像



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ABCA4 antibody [3F4] (ab77285)

ab77285, at a 1/100 dilution, staining ABCA4 in formalin fixed, paraffin embedded adult mouse retina tissue by Immunohistochemisty.



Western blot - Anti-ABCA4 antibody [3F4] (ab77285)

All lanes : Anti-ABCA4 antibody [3F4] (ab77285) at 1/500 dilution

Lane 1 : WERI (Human Retinoblastoma) Whole Cell Lysate
Lane 2 : Y79 (Human retinoblastoma cell line) Whole Cell Lysate
Lane 3 : Rat Retina Tissue Lysate

Lysates/proteins at 10 µg per lane.

Secondary
All lanes : Goat Anti-Mouse IgG H&L (HRP) preadsorbed (**ab97040**) at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 257 kDa
Observed band size: 257 kDa
Additional bands at: 142 kDa, 51 kDa. We are unsure as to the identity of these extra bands.

Exposure time: 20 minutes

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