

Mouse ABCA4 (Rim Protein) Monoclonal Antibody | anti-ABCA4 antibody

Anti-ABCA4 (Rim Protein)

CATALOG # AAA72744	HOST Mouse	REACTIVITY Bovine, human, mouse, Xenopus	APPLICATIONS Immunohistochemistry, Western Blot
------------------------------	----------------------	--	---

PRODUCT SYNONYMS

ABCA4 (Rim Protein); Monoclonal Antibody; Anti-ABCA4 (Rim Protein); anti-ABCA4 antibody

PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Bovine, human, mouse, Xenopus
Clonality	Monoclonal
Isotype	IgG
Clone Number	3F4
Specificity	Specific for ABCA4 protein in Western Blots of bovine, human, mouse and Xenopus tissues.
Purity/Purification	Protein G purified (Protein G purified culture supernatant)
Form/Format	100 ul in 10 mM HEPES (pH 7.5), 150 mM NaCl, 100 ug per ml BSA and 50% glycerol. Adequate amount of material to conduct 10-mini Western Blots.
Sequence Length	2310
Applicable Applications for anti-ABCA4 antibody	IHC (Immunohistochemistry), WB (Western Blot)
Antigen	Partially purified bovine 220-kDa disc rim protein.
Immunogen Information	Partially purified bovine 220-kDa disc rim protein
Immunogen Species	Bovine
Species Reactivity Note	The antibody has been directly tested for reactivity in bovine, human, mouse and Xenopus tissues.
Biological Significance	ABCA4 (ATP-binding cassette, sub-family A (ABC1), member 4, Rim Protein) is a member of the superfamily of ATP-binding cassette (ABC) transporters (Illing et al., 1997). ABC proteins transport various molecules across extra- and intracellular membranes. This protein is a retina-specific ABC transporter with N-retinylidene-PE as a substrate. It is expressed exclusively in retina photoreceptor cells, indicating the gene product mediates transport of an essential molecule across the photoreceptor cell membrane. Mutations in this gene are found in patients identified with Stargardt disease and are associated with retinitis pigmentosa-19 and age-related macular degeneration (Wiszniewski et al., 2003). Defects in ABCA4 are the cause of Stargardt disease type 1 (STGD1) (Molday et al., 2000). STGD is one of the most frequent causes of macular degeneration in childhood. Defects in ABCA4 are also known to cause fundus flavimaculatus (FFM), age-related macular degeneration type 2 (ARMD2) and cone-rod dystrophy type 3 (CORD3) (Klevering et al., 2005).
Preparation and Storage	Store at -20 degree C in undiluted aliquots; stable for up to one year after date of receipt. Avoid freeze/thaw cycles.

IMAGES



Application Data

ADDITIONAL INFORMATION

Related Product Information for anti-ABCA4 antibody	Mouse monoclonal antibody
References	- Michelle Illing, Laurie L. Molday and Robert S. Molday. The 220-kDa Rim Protein of Retinal Rod Outer Segments Is a Member of the ABC Transporter Superfamily. J. Biol. Chem., (1997) Vol 272 (15) I April 11. 10303-10310. - Klevering BJ, Deutman AF, Maugeri A, Cremers FP, Hoyng CB (2005) The spectrum of retinal phenotypes casued by mutations in the ABCA4 gene. Graefes Arch Clin Exp Ophthalmol. 243(2):90-100. - Molday, L. et al., ABCR expression in foveal cone photoreceptors and its role in Stargardt macular dystrophy. Nature Genetics (2000) 25, 257 - 258. - Wiszniewski, W. et al., ABCA4 mutations causing mislocalization are found frequently in patients with severe retinal dystrophies. Human Molecular Genetics (2005) 14(19):2769-2778.

NCBI AND UNIPROT INFORMATION

NCBI GI #	60391189
NCBI GeneID	11304
UniProt Accession #	O35600
Molecular Weight	220
NCBI Official Full Name	Retinal-specific ATP-binding cassette transporter
NCBI Official Synonym Full Names	ATP-binding cassette, sub-family A (ABC1), member 4
NCBI Official Symbol	Abca4
NCBI Official Synonym Symbols	RmP; Abcr; Abc10; AW050280; D430003I15Rik
NCBI Protein Information	retinal-specific ATP-binding cassette transporter; Rim protein; RIM ABC transporter; ATP-binding cassette 10; ATP-binding cassette sub-family A member 4
UniProt Protein Name	Retinal-specific ATP-binding cassette transporter
UniProt Gene Name	Abca4
UniProt Synonym Gene Names	Abcr; RIM protein; RmP
UniProt Entry Name	ABCA4_MOUSE

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://stage.aaabiotech.com/monoclonal/abca4-rim-protein-antibody-clone-3f4-immunohistochemistry-western-blot-elisa/72744>