



# Human ABCA4 blocking peptide (CDBP0258)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

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| <b>Product Overview</b>    | Blocking/Immunizing peptide for anti-ABCA4 antibody                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Antigen Description</b> | The membrane-associated protein encoded by this gene is a member of the superfamily of ATP-binding cassette (ABC) transporters. ABC proteins transport various molecules across extra- and intracellular membranes. ABC genes are divided into seven distinct subfamilies (ABC1, MDR/TAP, MRP, ALD, OABP, GCN20, White). This protein is a member of the ABC1 subfamily. Members of the ABC1 subfamily comprise the only major ABC subfamily found exclusively in multicellular eukaryotes. 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 diagnosed with Stargardt disease, a form of juvenile-onset macular degeneration. Mutations in this gene are also associated with retinitis pigmentosa-19, cone-rod dystrophy type 3, early-onset severe retinal dystrophy, fundus flavimaculatus, and macular degeneration age-related 2. |
| <b>Species</b>             | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Conjugate</b>           | Unconjugated                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Applications</b>        | Apuri, BL, ELISA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Format</b>              | Lyophilized powder                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Size</b>                | 100 µg                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Preservative</b>        | None                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Storage</b>             | Shipped at ambient temperature, store at -20°C.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

## GENE INFORMATION

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| <b>Gene Name</b>           | <a href="#">ABCA4 ATP-binding cassette, sub-family A (ABC1), member 4 [ Homo sapiens ]</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Official Symbol</b>     | ABCA4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Synonyms</b>            | ABCA4; ATP-binding cassette, sub-family A (ABC1), member 4; ABCR, ATP binding cassette transporter, retinal specific , RP19, STGD, STGD1; retinal-specific ATP-binding cassette transporter; ARMD2; FFM; Stargardt disease; RIM protein; RIM ABC transporter; photoreceptor rim protein; stargardt disease protein; retina-specific ABC transporter; ATP binding cassette transporter; ATP-binding transporter, retina-specific; ATP-binding cassette sub-family A member 4; ATP-binding cassette transporter, retinal-specific; RMP; ABCR; RP19; STGD; ABC10; CORD3; STGD1; FLJ17534; DKFZp781N1972; |
| <b>Entrez Gene ID</b>      | <a href="#">24</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>mRNA Refseq</b>         | <a href="#">NM_000350</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Protein Refseq</b>      | <a href="#">NP_000341</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>UniProt ID</b>          | P78363                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Chromosome Location</b> | 1p22                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Pathway</b>             | ABC transporters, organism-specific biosystem; ABC transporters, conserved biosystem; ABC-family proteins mediated transport, organism-specific biosystem; Transmembrane transport of small molecules, organism-specific biosystem;                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Function</b>            | ATP binding; ATPase activity; ATPase activity, coupled to transmembrane movement of substances; nucleotide binding; phospholipid-translocating ATPase activity; transporter activity;                                                                                                                                                                                                                                                                                                                                                                                                                 |