

ELOVL4 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP16326b

Product Information

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| Application | WB, E |
| Primary Accession | Q9GZR5 |
| Other Accession | Q95K73 , NP_073563.1 |
| Reactivity | Human |
| Predicted | Monkey |
| Host | Rabbit |
| Clonality | Polyclonal |
| Isotype | Rabbit IgG |
| Clone Names | RB35758 |
| Calculated MW | 36829 |
| Antigen Region | 286-314 |

Additional Information

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| Gene ID | 6785 |
| Other Names | Elongation of very long chain fatty acids protein 4, 3-keto acyl-CoA synthase ELOVL4, ELOVL fatty acid elongase 4, ELOVL FA elongase 4, Very-long-chain 3-oxoacyl-CoA synthase 4, ELOVL4 |
| Target/Specificity | This ELOVL4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 286-314 amino acids from the C-terminal region of human ELOVL4. |
| Dilution | WB~~1:1000 E~~Use at an assay dependent concentration. |
| Format | Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification. |
| Storage | Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles. |
| Precautions | ELOVL4 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures. |

Protein Information

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| Name | ELOVL4 {ECO:0000255 HAMAP-Rule:MF_03204} |
| Function | Catalyzes the first and rate-limiting reaction of the four reactions that |

constitute the long-chain fatty acids elongation cycle. This endoplasmic reticulum-bound enzymatic process allows the addition of 2 carbons to the chain of long- and very long-chain fatty acids (VLCFAs) per cycle. Condensing enzyme that catalyzes the synthesis of very long chain saturated (VLC-SFA) and polyunsaturated (PUFA) fatty acids that are involved in multiple biological processes as precursors of membrane lipids and lipid mediators. May play a critical role in early brain and skin development.

Cellular Location

Endoplasmic reticulum membrane {ECO:0000255|HAMAP-Rule:MF_03204, ECO:0000269|PubMed:16036915, ECO:0000269|PubMed:20937905}; Multi-pass membrane protein {ECO:0000255|HAMAP-Rule:MF_03204}

Tissue Location

Expressed in the retina and at much lower level in the brain. Ubiquitous, highest expression in thymus, followed by testis, small intestine, ovary, and prostate. Little or no expression in heart, lung, liver, or leukocytes.

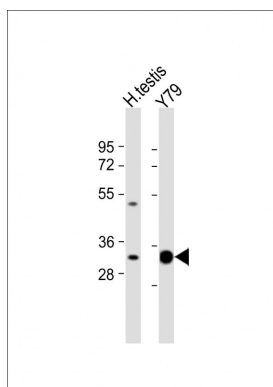
Background

ELOVL4 is a membrane-bound protein which is a member of the ELO family, proteins which participate in the biosynthesis of fatty acids. Consistent with the expression of the encoded protein in photoreceptor cells of the retina, mutations and small deletions in this gene are associated with Stargardt-like macular dystrophy (STGD3) and autosomal dominant Stargardt-like macular dystrophy (ADMD), also referred to as autosomal dominant atrophic macular degeneration.

References

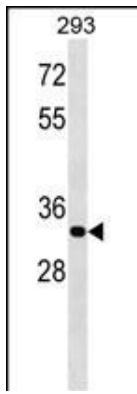
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Gu, H., et al. Zhonghua Yan Ke Za Zhi 46(2):125-128(2010)
DeAngelis, M.M., et al. Arch. Ophthalmol. 125(1):49-54(2007)
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Images



All lanes : Anti-ELOVL4 Antibody (C-term) at 1:1000 dilution Lane 1: human testis lysate Lane 2: Y79 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 37 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

ELOVL4 Antibody (C-term) (Cat. #AP16326b) western blot analysis in 293 cell line lysates (35ug/lane). This demonstrates the ELOVL4 antibody detected the ELOVL4 protein (arrow).



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.