

Product datasheet

Anti-ELOVL4 antibody ab224608

1 References 4 Images

Overview

Product name	Anti-ELOVL4 antibody
Description	Rabbit polyclonal to ELOVL4
Host species	Rabbit
Tested applications	Suitable for: ICC/IF, WB, IHC-P
Species reactivity	Reacts with: Rat, Human Predicted to work with: Cynomolgus monkey, Rhesus monkey
Immunogen	Recombinant fragment corresponding to Human ELOVL4 aa 270-314. Sequence: YKEPKKPKAGKTAMNGISANGVSKSEKQLMIENGKKQKN GKAKGD Database link: Q9GZR5 Run BLAST with Run BLAST with
Positive control	WB: HepG2 cell lysate; rat heart and liver tissue lysate. IHC: Human testis and small intestine tissue. ICC/IF: HepG2 cells.
General notes	<p>Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.</p> <p>Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.</p> <p>We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.</p> <p>In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.</p> <p>We are also updating the applications & species that this product has been “predicted to work with,” however this information is not covered by our Abpromise guarantee.</p> <p>Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.</p> <p>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, as well as</p>

customer reviews and Q&As.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.40 Constituents: 50% Glycerol, PBS, 0.03% Proclin 300
Purity	Protein G purified
Clonality	Polyclonal
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab224608** in the following tested applications.

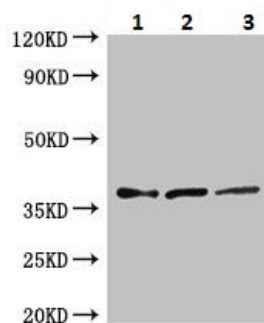
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF		1/50 - 1/200.
WB		1/500 - 1/5000. Detects a band of approximately 37 kDa (predicted molecular weight: 37 kDa).
IHC-P		1/20 - 1/200.

Target

Function	Condensing enzyme that elongates saturated and monounsaturated very long chain fatty acids (VLCFAs). Elongates C24:0 and C26:0 acyl-CoAs. Seems to represent a photoreceptor-specific component of the fatty acid elongation system residing on the endoplasmic reticulum. May be implicated in docosahexaenoic acid (DHA) biosynthesis, which requires dietary consumption of the essential alpha-linolenic acid and a subsequent series of three elongation steps.
Tissue specificity	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.
Involvement in disease	Defects in ELOVL4 are the cause of Stargardt disease type 3 (STGD3) [MIM:600110]. STGD3 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. STGD3 inheritance is autosomal dominant.
Sequence similarities	Belongs to the ELO family.
Domain	The di-lysine motif may confer endoplasmic reticulum localization.
Cellular localization	Endoplasmic reticulum membrane.

Images



Western blot - Anti-ELOVL4 antibody (ab224608)

All lanes : Anti-ELOVL4 antibody (ab224608) at 1/500 dilution

Lane 1 : HepG2 (human liver hepatocellular carcinoma cell line) cell lysate

Lane 2 : Rat heart lysate

Lane 3 : Rat liver lysate

Secondary

All lanes : Goat polyclonal to rabbit IgG at 1/50000 dilution

Predicted band size: 37 kDa

Observed band size: 37 kDa

Blocking: 5% milk (non-

fat dry milk dissolved in PBST) incubate overnight under 4 °C.

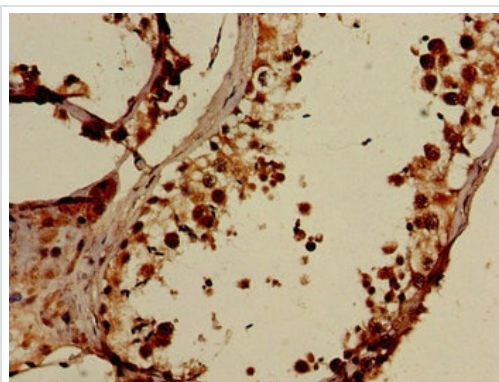
Primary antibody incubation: Dilute primary antibody with 5% milk (non-fat dry milk dissolved in PBST), incubate overnight at 4°C.

Washing: PBST, 4 times, 10 minutes.

Secondary antibody incubation: Dilute secondary antibody at 1/10000 or 1/20000 with 5% milk (non-

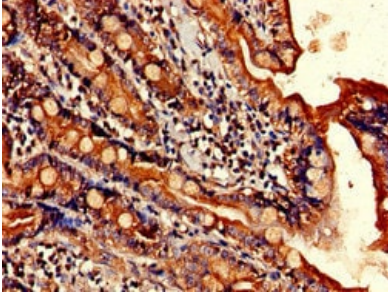
fat dry milk dissolved in PBST), incubate for 1 hour under 25°C.

Washing: PBST, 4 times, 10 minutes.



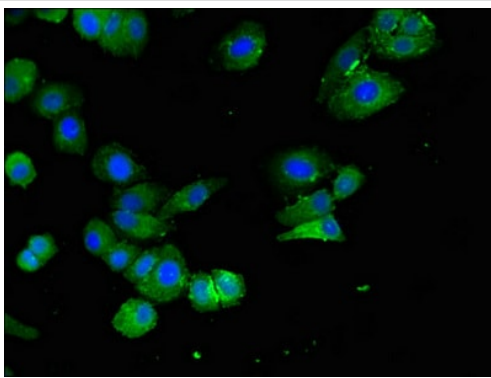
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ELOVL4 antibody (ab224608)

Paraffin-embedded human testis tissue stained for ELOVL4 using ab224608 at 1/100 dilution in immunohistochemical analysis.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ELOVL4 antibody (ab224608)

Paraffin-embedded human small intestine tissue stained for ELOVL4 using ab224608 at 1/100 dilution in immunohistochemical analysis.



Immunocytochemistry/ Immunofluorescence - Anti-ELOVL4 antibody (ab224608)

HepG2 (human liver hepatocellular carcinoma cell line) cells stained for ELOVL4 (green) using ab224608 at 1/100 dilution in ICC/IF.

Secondary antibody: Alexa Fluor[®] 488-conjugated AffiniPure Goat Anti-Rabbit IgG (H+L).

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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