

ELOV4. Rabbit Antigen Immunoaffinity Purified Polyclonal , Human

Elongation of very long chain fatty acids protein 4, ELOVL4

BACKGROUND

Mutations in elongation of very long-chain fatty acid-4 (ELOVL4) are associated with autosomal dominant Stargardt-like macular degeneration (STGD3), with a five base-pair (5 bp) deletion mutation resulting in the loss of 51 carboxy-terminal amino acids and truncation of the protein. Elovl4 is expressed in the retina and only a limited number of mammalian other tissues, including skin, with unknown function. In a mouse model with the 5-bp deletion in the Elovl4 gene, mice in the heterozygous state (Elovl4(+ / del)) demonstrate progressive photoreceptor degeneration. Homozygous mice (Elovl4(del / del)) display scaly, wrinkled skin, have severely compromised epidermal permeability barrier function, and die within a few hours after birth. Lipid analyses of epidermis from Elovl4(del / del) mice show a decrease in very long-chain fatty acids (VLFAs) in both the ceramide/glucoylceramide and the free fatty-acid fractions. ELOVL4 is required for generating VLFA critical for epidermal barrier function.

ORDERING INFORMATION

CATALOG NUMBER
X2381P

SIZE
10 Miniblots

FORM
Affinity Purified

HOST/CLONE
Rabbit

FORMULATION
Provided as solution in phosphate buffered saline with 0.08% sodium azide

CONCENTRATION
Lot specific, see vial

ISOTYPE
IgG

APPLICATIONS
Western Blot

IMMUNOGEN

Synthetic peptide derived from the human ELOV4 protein

SPECIES REACTIVITY

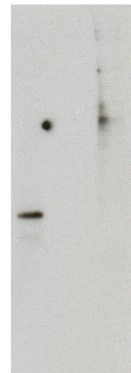
Human

Legend:

Western blot using Exalpha's X2381P, antigen affinity purified rabbit polyclonal at 10 ug/ml on HeLa cell extract (20 ug/ lane). Blocking peptide was preincubated with primary antibody for 1.5 hours, 10 ug peptide). Blots were developed with goat anti-rabbit Ig (1:75k) and Pierce's Supersignal West Femto system.

X2087P (10 ug/ml)	+	+
Blocking Peptide	-	+

62 -
49 -
38 -
28 -
17 -



For research use only. Not for use in human diagnostics or therapeutics.

POSITIVE CONTROL/TISSUE EXPRESSION

Expressed in the retina and at much lower level in the brain.

COMMENTS

Antibody can be used for Western blotting (1:400 starting dilution). Optimal concentration should be evaluated by serial dilutions.

SHIP CONDITIONS

Ship on gel ice, store at -20°C immediately upon arrival

STORAGE CUSTOMER

Product should be stored at -20°C. Aliquot to avoid freeze/thaw cycles

STABILITY

Products are stable for one year from purchase when stored properly

REFERENCES

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- 9: Koo AJ, et al. Identification of a plastid acyl-acyl carrier protein synthetase in *Arabidopsis* and its role in the activation and elongation of exogenous fatty acids. *Plant J.* 2005 Nov;44(4):620-32.
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LAST MODIFIED 6/26/2008

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