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ELOVL5 Antibody

Rabbit mAb
Catalog # AP93089

Product Information

Application	WB, IF, ICC
Primary Accession	Q9NYP7
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Other Names	3 keto acyl CoA synthase ELOVL5; Elongation of very long chain fatty acids like 5; ELOVL 5; ELOVL family member 5; ELOVL family member 5 elongation of long chain fatty acids; ELOVL fatty acid elongase 5; ELOVL2; elovl5; Fatty acid elongase 1; hELO1; RP3 483K16.1; RP3-483K16.1;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	35293

Additional Information

Dilution	WB 1:500~1:2000 ICC/IF 1:50~1:200
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human ELOVL5
Description	Condensing enzyme that catalyzes the synthesis of monounsaturated and of polyunsaturated very long chain fatty acids Acts specifically toward polyunsaturated acyl-CoA with the higher activity toward C18:3(n-6) acyl-CoA.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

Protein Information

Name	ELOVL5 {ECO:0000255|HAMAP-Rule:MF_03205}
Synonyms	ELOVL2
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 acts specifically toward polyunsaturated acyl-CoA with the higher activity toward C18:3(n-6) acyl-CoA. May participate in the production of monounsaturated and of polyunsaturated VLCFAs of different chain lengths that are involved in multiple biological processes as precursors of membrane lipids and lipid mediators (By similarity) (PubMed:10970790, PubMed:20937905). In conditions where the essential linoleic and alpha linoleic fatty acids are lacking it is also involved in the synthesis of Mead acid

from oleic acid (By similarity).

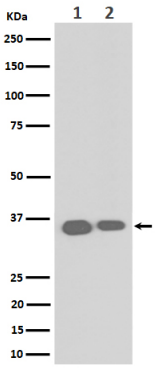
Cellular Location

Endoplasmic reticulum membrane {ECO:0000255|HAMAP-Rule:MF_03205, ECO:0000269|PubMed:20937905}; Multi- pass membrane protein {ECO:0000255|HAMAP-Rule:MF_03205}. Cell projection, dendrite {ECO:0000255|HAMAP-Rule:MF_03205, ECO:0000269|PubMed:25065913}. Note=In Purkinje cells, the protein localizes to the soma and proximal portion of the dendritic tree {ECO:0000255|HAMAP-Rule:MF_03205, ECO:0000269|PubMed:25065913}

Tissue Location

Ubiquitous. Highly expressed in the adrenal gland and testis. Weakly expressed in prostate, lung and brain. Expressed in the cerebellum.

Images



Western blot analysis of ELOVL5 expression in (1) HeLa cell lysate; (2) RAW 264.7 cell lysate.