

GPSN2 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP9788b

Specification

GPSN2 Antibody (C-term) - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Calculated MW Antigen Region IHC-P, WB,E <u>O9NZ01</u> <u>O64232</u>, <u>O9CY27</u>, <u>O3ZCD7</u> Human Bovine, Mouse, Rat Rabbit Polyclonal Rabbit IgG 36034 268-295

GPSN2 Antibody (C-term) - Additional Information

Gene ID 9524

Other Names Very-long-chain enoyl-CoA reductase, Synaptic glycoprotein SC2, Trans-2, 3-enoyl-CoA reductase, TER, TECR, GPSN2, SC2

Target/Specificity

This GPSN2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 268-295 amino acids from the C-terminal region of human GPSN2.

Dilution IHC-P~~1:50~100 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

GPSN2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

GPSN2 Antibody (C-term) - Protein Information



Name TECR

Synonyms GPSN2, SC2

Function Involved in both the production of very long-chain fatty acids for sphingolipid synthesis and the degradation of the sphingosine moiety in sphingolipids through the sphingosine 1-phosphate metabolic pathway (PubMed:25049234). Catalyzes the last of the four reactions of the long-chain fatty acids elongation cycle (PubMed:12482854). 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 (PubMed:12482854). This enzyme reduces the trans-2,3-enoyl- CoA fatty acid intermediate to an acyl-CoA that can be further elongated by entering a new cycle of elongation (PubMed:12482854). Thereby, it participates in the production of VLCFAs of different chain lengths that are involved in multiple biological processes as precursors of membrane lipids and lipid mediators (PubMed:12482854). Catalyzes the saturation step of the sphingosine 1-phosphate metabolic pathway, the conversion of trans-2-hexadecenoyl-CoA to palmitoyl-CoA (PubMed:25049234).

Cellular Location Endoplasmic reticulum membrane; Multi-pass membrane protein

Tissue Location Expressed in most tissues tested. Highly expressed in skeletal muscle.

GPSN2 Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

GPSN2 Antibody (C-term) - Images





Western blot analysis of GPSN2 Antibody (C-term) (Cat. #AP9788b) in A2058 cell line lysates (35ug/lane). GPSN2 (arrow) was detected using the purified Pab.



GPSN2 Antibody (C-term) (Cat. #AP9788b) IHC analysis in formalin fixed and paraffin embedded skeletal muscle followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the GPSN2 Antibody (C-term) for immunohis??

GPSN2 Antibody (C-term) - Background

Microsomal long and very long chain fatty acid elongation uses malonyl-CoA as the 2-carbon donor and consists of 4 sequential reactions. TER catalyzes the final step, reducing trans-2,3-enoyl-CoA to saturated acyl-CoA.

GPSN2 Antibody (C-term) - References

Hashmi, G., et al. Transfusion 45(5):680-688(2005) Moon, Y.A., et al. J. Biol. Chem. 278(9):7335-7343(2003) Mao, M., et al. Proc. Natl. Acad. Sci. U.S.A. 95(14):8175-8180(1998)