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Ceramide synthase 1 Rabbit pAb

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Catalog # AP58273

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	P27544
Reactivity	Rat
Predicted	Pig, Dog, Human, Mouse, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	39536
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human LASS1
Epitope Specificity	181-280/350
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Endoplasmic reticulum membrane; Multi-pass membrane protein. Isoform 1: Endoplasmic reticulum membrane; Multi-pass membrane protein. Golgi apparatus membrane; Multi-pass membrane protein. Note=Isoform 1 may recycle from the Golgi to the endoplasmic reticulum.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	LASS1 may be either a bona fide (dihydro)ceramide synthase or a modulator of its activity. When overexpressed in cells it is involved in the production of sphingolipids containing mainly one fatty acid donnor in a fumonisin B1-independent manner.

Additional Information

Gene ID	10715
Other Names	Ceramide synthase 1, CerS1, LAG1 longevity assurance homolog 1, Longevity assurance gene 1 protein homolog 1, 2.3.1.299, CERS1 {ECO:0000303|PubMed:17977534, ECO:0000312|HGNC:HGNC:14253}
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

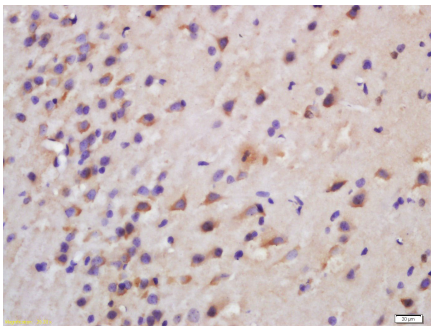
Protein Information

Name	CERS1 {ECO:0000303|PubMed:17977534, ECO:0000312|HGNC:HGNC:14253}
Function	Ceramide synthase that catalyzes the transfer of the acyl chain from acyl-CoA to a sphingoid base, with high selectivity toward stearoyl-CoA (octadecanoyl-CoA; C18:0-CoA) (PubMed:17977534, PubMed:23530041, PubMed:26887952, PubMed:31916624). N-acylates sphinganine and sphingosine bases to form dihydroceramides and ceramides in de novo synthesis and salvage pathways, respectively (PubMed:17977534, PubMed:23530041, PubMed:24782409, PubMed:26887952, PubMed:31916624). Plays a predominant role in skeletal muscle in regulating C18 ceramide and dihydroceramide levels with an impact on whole-body glucose metabolism and insulin sensitivity. Protects from diet-induced obesity by suppressing the uptake of glucose in multiple organs in a FGF21-dependent way (By similarity). Generates C18 ceramides in the brain, playing a critical role in cerebellar development and Purkinje cell function (By similarity). In response to cellular stress mediates mitophagy, a known defense mechanism against cell transformation and aging. Upon mitochondria fission, generates C18 ceramides that anchor lipidated MAP1LC3B/LC3B-II autophagolysosomes to outer mitochondrial membranes to eliminate damaged mitochondria (PubMed:22922758).
Cellular Location	Endoplasmic reticulum membrane; Multi-pass membrane protein

Background

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Images



Tissue/cell: rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min;
Incubation: Anti-CERS1 Polyclonal Antibody, Unconjugated(AP58273) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining

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