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Ceramide synthase 1 Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP58273

Specification

Ceramide synthase 1 Polyclonal Antibody - Product Information

Application	**WB, IHC-P, IHC-F, IF, E**
Primary Accession	P27544
Reactivity	**Rat, Pig, Dog, Bovine**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**39 KDa**
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.**
SIMILARITY	**Contains 1 TLC (TRAM/LAG1/CLN8) domain.**
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.

Ceramide synthase 1 Polyclonal Antibody - Additional Information

Gene ID 10715

Other Names
Ceramide synthase 1, CerS1, 2.3.1.-, LAG1 longevity assurance homolog 1, Longevity assurance gene 1 protein homolog 1, Protein UOG-1, CERS1 {ECO:0000303|PubMed:17977534, ECO:0000312|HGNC:HGNC:14253}

Dilution

WB~~1:1000<br \>IHC-P~~N/A<br \>IHC-F~~N/A<br \>IF~~1:50~200<br \>E~~N/A

Format
0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage
Store at -20 ℃ 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 ℃.

Ceramide synthase 1 Polyclonal Antibody - 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

Ceramide synthase 1 Polyclonal Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation

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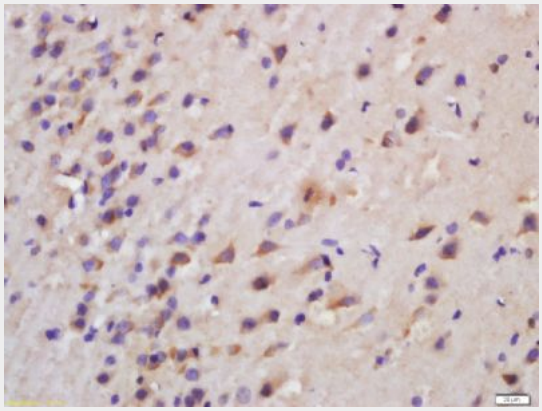
- Flow Cytomety
- Cell Culture

Ceramide synthase 1 Polyclonal Antibody - 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(bs-5076R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining