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LASS6 Antibody
Catalog # ASC10813

Specification

LASS6 Antibody - Product Information

Application	**WB, IHC, IF**
Primary Accession	Q6ZMG9
Other Accession	AAI09285, 80478334
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Application Notes	**LASS6 antibody can be used for detection of LASS6 by Western blot at 1 - 2 µg/mL. Antibody can also be used for immunohistochemistry starting at 2.5 µg/mL. For immunofluorescence start at 20 µg/mL.**

LASS6 Antibody - Additional Information

Gene ID **253782**

Target/Specificity
LASS6; At least two isoforms of LASS6 are known to exist. This antibody is predicted not to cross-react with LASS5.

Reconstitution & Storage
LASS6 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Precautions
LASS6 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

LASS6 Antibody - Protein Information

Name CERS6 (HGNC:23826)

Function
Ceramide synthase that catalyzes the transfer of the acyl chain from acyl-CoA to a sphingoid base, with high selectivity toward palmitoyl-CoA (hexadecanoyl-CoA; C16:0-CoA) (PubMed:17609214, PubMed:17977534, PubMed:23530041, PubMed:26887952, PubMed:31916624). Can use other acyl donors, but with less efficiency (By similarity). N- acylates sphinganine and sphingosine bases to form dihydroceramides and ceramides in de novo synthesis and salvage pathways,

respectively (PubMed:17977534, PubMed:23530041, PubMed:26887952, PubMed:31916624). Ceramides generated by CERS6 play a role in inflammatory response (By similarity). Acts as a regulator of metabolism and hepatic lipid accumulation (By similarity). Under high fat diet, palmitoyl- (C16:0-) ceramides generated by CERS6 specifically bind the mitochondrial fission factor MFF, thereby promoting mitochondrial fragmentation and contributing to the development of obesity (By similarity).

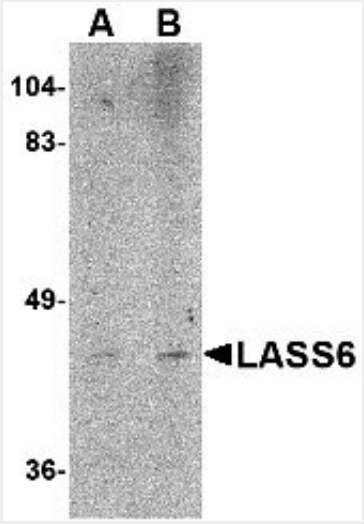
Cellular Location
Endoplasmic reticulum membrane {ECO:0000250|UniProtKB:Q8C172}; Multi-pass membrane protein {ECO:0000250|UniProtKB:Q8C172}

LASS6 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

LASS6 Antibody - Images



Western blot analysis of LASS6 in rat brain tissue lysate with LASS6 antibody at (A) 1 and (B) 2 µg/mL.

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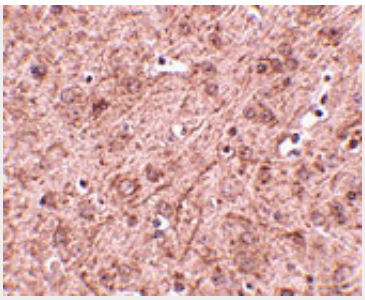
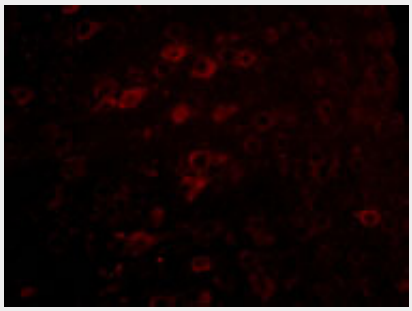


Immunohistochemistry of LASS6 in mouse brain tissue with LASS6 antibody at 2.5 µg/mL.



Immunofluorescence of LASS6 in Mouse Brain cells with LASS6 antibody at 5 µg/mL.

LASS6 Antibody - Background

LASS6 Antibody: The LASS (longevity assurance homolog) family members represent a subgroup of the homeobox gene family and are highly conserved from yeasts to mammals. Six members of this family of proteins have been characterized (LASS1-6) and all are involved in ceramide synthesis during cell growth regulation and cancer differentiation. Like the highly homologous LASS5, LASS6 is also an endoplasmic reticulum, multi-pass membrane protein. LASS6 is also involved in the synthesis of C14, C16 and C18-ceramide, but shows a preference for unsaturated fatty acids. LASS6 is broadly expressed in a wide range of tissues and microarray data suggests that it may play a role in cancer differentiation and early embryonic development.

LASS6 Antibody - References

Riebeling C, Allegood JC, Wang E, et al. Two mammalian longevity assurance gene (LAG1) family members, Trh1 and Trh, regulate dihydroceramide synthesis using different fatty acyl-CoA donors. J. Biol. Chem.2003; 278:43452-9.
Mizutani Y, Kihara A and Igarashi Y. Mammalian Lass6 and its related family members regulate synthesis of specific ceramides. Biochem. J.2005; 390:263-71.
Lahiri S and Futerman AH. LASS5 is a bona fide dihydroceramide synthase that selectively utilizes palmitoyl-CoA as acyl donor. J. Biol Chem.2005; 280:33735-8.
Weinmann A, Galle PR, and Teufel A. LASS6, an additional member of the longevity assurance gene family. Int. J. Mol. Med.2005; 16:905-10.