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# LASS1 antibody - middle region

Rabbit Polyclonal Antibody
Catalog # AI13060

## Product Information

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| **Application** | WB |
| **Primary Accession** | P27544 |
| **Other Accession** | NM_021267, NP_067090 |
| **Reactivity** | Human, Mouse, Rat, Horse |
| **Predicted** | Human, Mouse, Rat, Horse |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Calculated MW** | 39536 |

## Additional Information

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| **Gene ID** | 10715 |
| **Alias Symbol** | CerS1, LAG1, MGC90349, UOG1, LASS1 |
| **Other Names** | Ceramide synthase 1, CerS1, LAG1 longevity assurance homolog 1, Longevity assurance gene 1 protein homolog 1, Protein UOG-1, CERS1, LAG1, LASS1, UOG1 |
| **Format** | Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose. |
| **Reconstitution & Storage** | Add 50 ul of distilled water. Final anti-LASS1 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles. |
| **Precautions** | LASS1 antibody - middle region is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

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| **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 |

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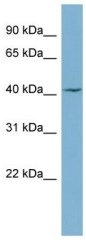
| | glucose metabolism and insulin sensitivity. Protects from diet-induced obesity by suppressing the uptake of glucose in multiple organs in a FGF21-dependent way (By similarity). Generates C18 ceramides in the brain, playing a critical role in cerebellar development and Purkinje cell function (By similarity). 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 |

## References


Lee S.-J.,et al.Proc. Natl. Acad. Sci. U.S.A. 88:4250-4254(1991).
Jiang J.C.,et al.Genome Res. 8:1259-1272(1998).
Grimwood J.,et al.Nature 428:529-535(2004).
Bienvenut W.V.,et al.Mol. Cell. Proteomics 11:M111.015131-M111.015131(2012).


## Images




WB Suggested Anti-LASS1 Antibody Titration: 0.2-1 µg/ml
ELISA Titer: 1:12500
Positive Control: OVCAR-3 cell lysate