

Lass6. Rabbit Antigen Immunoaffinity Purified Polyclonal , Human

LAG1 longevity assurance homolog 6

BACKGROUND

Longevity assurance genes (LAGs) represent a subgroup of the homeobox gene family. Five mammalian homologs have been reported, and the corresponding proteins have previously been investigated with respect to their key role in ceramide synthesis. However, members of the LAG family have been shown to be involved in cell growth regulation and cancer differentiation. May be involved in sphingolipid synthesis or its regulation. Interacts with ATP6V0C, ASGR1, ASGR2 and SLC22A1/OCT1. Localized to nuclear membrane a multi-pass membrane protein, may be expressed on endoplasmic reticulum membrane. Glycosylation on Asn-18 is not necessary for function. Like other LAG family members, the LASS6 protein contained a homeodomain and LAG1 domain. Lass6 displays highest homology to LASS5. The corresponding gene was localized to human chromosome 2q24.3, spanning a rather large genomic region of 318 kb. Sequences in mouse and zebrafish suggested a conservation of LASS6 in vertebrates because the protein and corresponding genomic sequences are highly conserved. LASS6 was shown to be broadly expressed in a wide range of tissues. Recent data suggested a role in cancer differentiation and early embryonic development.

ORDERING INFORMATION

CATALOG NUMBER
X2301P

SIZE
10 Miniblots

FORM
Affinity Purified

HOST/CLONE
Rabbit

FORMULATION
Provided as solution in phosphate buffered saline with 0.08% sodium azide

CONCENTRATION
Lot specific, see vial

ISOTYPE

APPLICATIONS
Western blot

IMMUNOGEN

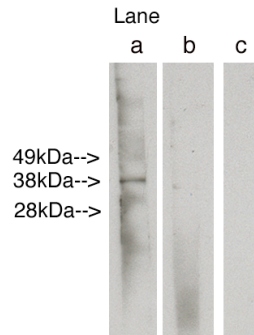
Synthetic peptide derived from human Lass6 protein

SPECIES REACTIVITY

Human

Legend:

Western blot analysis using LAG1 longevity assurance homolog 6 (Cat. # X2303P) at 6ug/ml on human Duodenum lysate 14 ug/lane. Lane A] antibody alone, Lane B] antibody plus 50 ug blocking peptide (Cat. # X2302B), Lane C] conjugate alone. Visualized using Pierce West Femto substrate system. Anti Rabbit secondary used at 1:3.5K dilution(Cat. # X1207M). Exposure for 1.5 minutes



For research use only. Not for use in human diagnostics or therapeutics.

POSITIVE CONTROL/TISSUE EXPRESSION

Widely expressed. Expressed in kidney, liver, brain, heart, placenta and lung.

COMMENTS

Antibody can be used for Western blotting (1:400 starting dilution). Optimal concentration should be evaluated by serial dilutions.

SHIP CONDITIONS

Ship on gel ice, store at -20°C immediately upon arrival

STORAGE CUSTOMER

Product should be stored at -20°C. Aliquot to avoid freeze/thaw cycles

STABILITY

Products are stable for one year from purchase when stored properly

REFERENCES

1: Mizutani Y, Kihara A, Igarashi Y. LASS3 (longevity assurance homologue 3) is a mainly testis-specific (dihydro)ceramide synthase with relatively broad substrate specificity. *Biochem J.* 2006 Sep 15;398(3):531-8.

2: Schulz A, Mousallem T, Venkataramani M, Persaud-Sawin DA, Zucker A, Luberto C, Bielawska A, Bielawski J, Holthuis JC, Jazwinski SM, Kozhaya L, Dbaibo GS, Boustany RM. The CLN9 protein, a regulator of dihydroceramide synthase. *J Biol Chem.* 2006 Feb 3;281(5):2784-94. Epub 2005 Nov 22.

3: Weinmann A, Galle PR, Teufel A. LASS6, an additional member of the longevity assurance gene family. *Int J Mol Med.* 2005 Nov;16(5):905-10.

4: Mizutani Y, Kihara A, Igarashi Y. Mammalian Lass6 and its related family members regulate synthesis of specific ceramides. *Biochem J.* 2005 Aug 15;390(Pt 1):263-71.

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