

## Lass6. Rabbit Polyclonal Antibody , 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**  
X2303P

**SIZE**  
100 µg

**FORM**  
Unconjugated

**HOST/CLONE**  
Rabbit

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

**CONCENTRATION**  
1 mg/ml

**ISOTYPE**

**APPLICATIONS**  
Western blot

### IMMUNOGEN

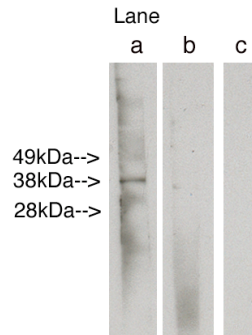
Synthetic peptide derived from human Lass6 protein

### SPECIES REACTIVITY

Human

### Legend:

Western blot analysis using LAG1 longevity assurance homolog 6 (Cat. # X2303P) at 6µg/ml on human Duodenum lysate 14 µg/lane. Lane A] antibody alone, Lane B] antibody plus 50 µg 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 (5-7 µg/ml). Optimal concentration should be evaluated by serial dilutions.

**SHIP CONDITIONS**

Ship at ambient temperature, freeze 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.

**LAST MODIFIED** 8/12/2008

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