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Datasheet for 600-401-CH7

# LASS5 Antibody

## Overview

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| **Description:** | Anti-LASS5 (RABBIT) Antibody - 600-401-CH7 |
| **Item No.:** | 600-401-CH7 |
| **Size:** | 100 µg |
| **Applications:** | ELISA, IF, WB |
| **Reactivity:** | Human, Mouse, Rat |
| **Host Species:** | Rabbit |

## Product Details

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| **Background:** | 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. LASS5, also called Trh4, is a 392 amino acid endoplasmic reticulum, multi-pass membrane protein. Functioning as a dihydro-ceramide synthase, LASS5 is involved in the production of sphingolipids containing mainly one fatty acid donor (N-linked palmitoyl-ceramide) in a fumonisin B1-independent manner. It uses palmitoyl-CoA as an acyl donor and is involved in the synthesis of C14, C16 and C18-ceramide. LASS5 is the most abundantly expressed and predominant ceramide synthase isoform in lung epithelia. Recent studies show that LASS5 partially correct growth and apoptosis. |
| **Synonyms:** | LASS5 Antibody, Trh4, LASS5, Ceramide synthase 5, LAG1 longevity assurance homolog 5, CerS5 |
| **Host Species:** | Rabbit |
| **Clonality:** | Polyclonal |
| **Format:** | IgG |

## Target Details

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| **Gene Name:** | CERS5 |
| **Reactivity:** | Human, Mouse, Rat |
| **Immunogen Type:** | Conjugated Peptide |

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| **Immunogen:** | Anti-LASS5 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 17 amino acid synthetic peptide near the C-terminus of the human LASS5. |
| **Purity/Specificity:** | Anti-LASS5 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. Multiple isoforms of LASS5 are known to exist. This antibody may cross-react with the highly homologous LASS6. |
| **Relevant Links:** | • UniProtKB - Q8N5B7<br>• GeneID - 91012<br>• NCBI - NP_671723 |

## Application Details

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| **Tested Applications:** | ELISA, IF, WB |
| **Application Note:** | Anti-LASS5 Antibody has been tested for use in ELISA, Western Blotting and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 46 kDa in Western Blots of specific cell lysates and tissues. |
| **Assay Dilutions:** | All assays should be optimized by the user. Recommended dilutions (if any) may be listed below. |
| **ELISA:** | 1:10,000 |
| **IF:** | 20 µg/mL |
| **WB:** | 1 µg/mL |

## Formulation

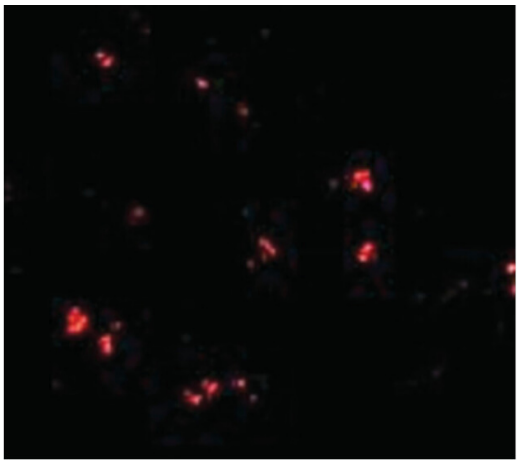
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| **Physical State:** | Liquid (sterile filtered) |
| **Concentration:** | 1 mg/mL by UV absorbance at 280 nm |
| **Buffer:** | 0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2 |
| **Preservative:** | 0.02% (w/v) Sodium Azide |
| **Stabilizer:** | None |

## Shipping & Handling

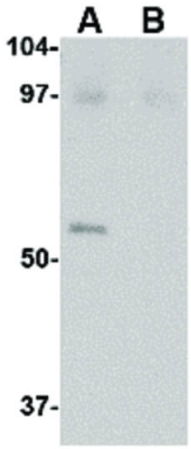
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| **Shipping Condition:** | Dry Ice |

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| **Storage Condition:** | Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use. |
| **Expiration:** | Expiration date is one (1) year from date of receipt. |

## Images



**Immunofluorescence Microscopy**
Immunofluorescence Microscopy of LASS5 antibody. Tissue:Human brain tissue. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: LASS5 antibody at 20 µg/mL for 1 h at RT. Secondary antibody: Fluorescein rabbit secondary antibody at 1:10,000 for 45 min at RT. Staining: LASS5 as a red fluorescent signal.




**Western Blot**
Western Blot of LASS5 antibody. Lane A: SK-H-SH lysate in the absence of blocking peptide. Lane B: SK-H-SH lysate in the presence of blocking peptide. Load: 35 µg per lane. Primary Antibody: Anti-LASS5 at 1 µg/mL. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 45.75 kDa, ~55 kDa for LASS5.

## Disclaimer

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