Datasheet for 600-401-CL2

LIS1 Antibody

Overview

Description:	Anti-LIS1 (RABBIT) Antibody - 600-401-CL2
Item No.:	600-401-CL2
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	Lissencephaly is a severe brain developmental disease characterized by the mislocalization of cortical neurons, a smooth cerebral surface, mental retardation, and seizures. Classical lissencephaly is caused by sporadic mutations in the LIS1 gene. While LIS1 is known to act in a pathway deactivating the lipid messenger platelet-activating factor, LIS1 forms a complex with Nudel and 14-3-3epsilon which is then transported from neuronal cell bodies through the actions of DISC1 and KIF5A, a microtubule-dependent directed motor protein kinesin. Decreased expression of LIS1 blocked neural stem cell division, morphogenesis, and motility, suggesting that LIS1 plays an important role in neuronal cell proliferation and localization in the developing brain. At least two isoforms of LIS1 are known to exist.
Synonyms:	LIS1 Antibody, MDS, LIS1, LIS2, MDCR, PAFAH, MDS, PAFAHA, Platelet-activating factor acetylhydrolase IB subunit alpha, Lissencephaly-1 protein, LIS-1
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	PAFAH1B1
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-LIS1 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 14 amino acid synthetic peptide from near the C-terminus of human LIS1.
Purity/Specificity:	Anti-LIS1 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. Cross reactivity with LIS1 from other sources has not been determined.
Relevant Links:	• UniProtKB - P43034 • GeneID - 5048 • NCBI - P43034

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	Anti-LIS1 Antibody has been tested for use in ELISA, Western Blotting, Immunocytochemistry and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 47 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:	1:5000 - 1:10000
IF:	20 µg/mL
WB:	0.5-1 µg/mL

Formulation

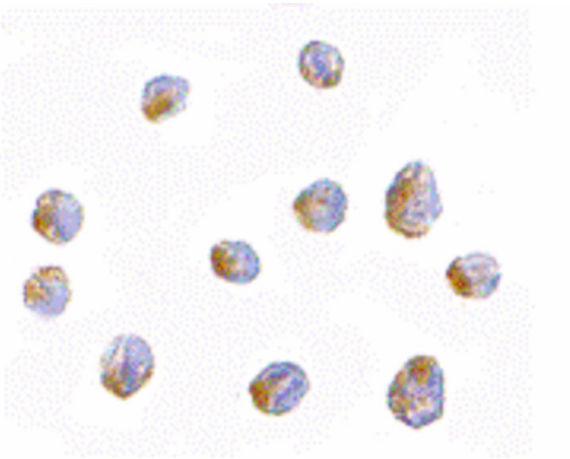
Physical State:	Liquid (sterile filtered)
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

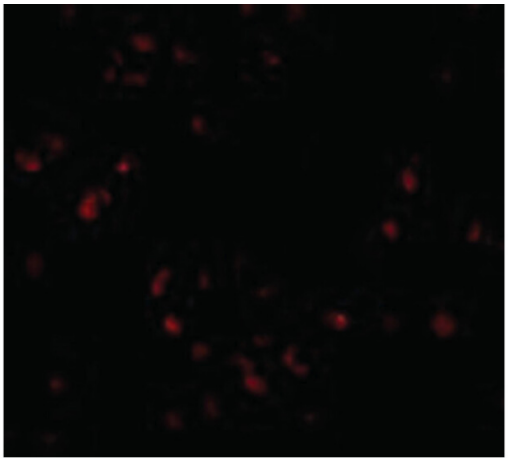
Shipping Condition:	Dry Ice
Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several 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.

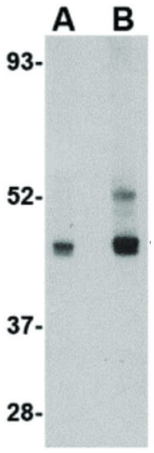
Images



Immunocytochemistry
Immunocytochemistry of LIS1 antibody. Tissue: Jurkat cells. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: LIS1 antibody at 2.5 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: LIS1 is nuclear and cytoplasmic. Staining: LIS1 as a precipitated brown signal with hematoxylin purple counterstain.



Immunofluorescence Microscopy
Immunofluorescence Microscopy of LIS1 antibody. Tissue: Jurkat cells. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: LIS1 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: LIS1 as a red fluorescent signal.



Western Blot

Western Blot of LIS1 antibody. Lane A: HeLa cell lysate at 0.5 µg/mL. Lane B: HeLa cell lysate at 1 µg/mL. Load: 35 µg per lane. 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: 46.6 kDa, ~46 kDa for LIS1.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.