# abcam

# Product datasheet

# Anti-LAMP2 antibody [GL2A7] ab13524

\*\*\* \* \* 13 Abreviews 182 References 2 Images

#### Overview

Product name Anti-LAMP2 antibody [GL2A7]

**Description** Rat monoclonal [GL2A7] to LAMP2

Host species Rat

**Tested applications** Suitable for: IHC-Fr, ICC, ICC/IF, IHC-FoFr, IP, Flow Cyt, WB, IHC-P

Species reactivity Reacts with: Mouse, Rabbit, Human

Immunogen Tissue, cells or virus corresponding to Mouse LAMP2. Purified preparation of mouse liver

lysosomal membranes.

**Positive control** WB: HEK-293 and NIH/3T3 cell lysate.

**General notes** For maximum product recovery, after thawing, centrifuge the product vial before removing cap.

The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

#### **Properties**

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

Storage buffer Preservative: 0.09% Sodium azide

Constituents: PBS, 50% Glycerol

**Purity** Protein G purified

Clonality Monoclonal
Clone number GL2A7

**Isotype** IgG

**Applications** 

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#### The Abpromise quarantee

Our **Abpromise guarantee** covers the use of ab13524 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes	
IHC-Fr	*** <u>*</u>	Use at an assay dependent concentration.	
ICC		Use at an assay dependent concentration.  Fix cells with methanol or with paraformaldehyde-lysine-periodate formulation. If the latter is used, permeabilize with saponin, not with Triton X-100 or NP-40. The antibody will label the presumptive lysosomes and late endosomes in cells that have been permeabilized with saponin 0.01%.	
ICC/IF	<b>★★★★</b> <u>(2)</u>	Use at an assay dependent concentration. See Abreview.	
IHC-FoFr	****(1)	Use at an assay dependent concentration. (PubMed:17425404)	
IP		Use at an assay dependent concentration. (PMID 2142158).	
Flow Cyt		Use at an assay dependent concentration. <u>ab37371</u> - Rat polyclonal lgG, is suitable for use as an isotype control with this antibody.	
WB	<b>★★★★☆ (7)</b>	1/500.	
IHC-P	**** <u>(1)</u>	Use at an assay dependent concentration.	

T	ar	g	et

**Function** 

Implicated in tumor cell metastasis. May function in protection of the lysosomal membrane from autodigestion, maintenance of the acidic environment of the lysosome, adhesion when expressed on the cell surface (plasma membrane), and inter-and intracellular signal transduction. Protects cells from the toxic effects of methylating mutagens.

Tissue specificity

Isoform LAMP-2A is highly expressed in placenta, lung and liver, less in kidney and pancreas, low in brain and skeletal muscle. Isoform LAMP-2B is highly expressed in skeletal muscle, less in brain, placenta, lung, kidney and pancreas, very low in liver.

Involvement in disease

Defects in LAMP2 are the cause of Danon disease (DAND) [MIM:300257]; also known as glycogen storage disease type 2B (GSD2B). DAND is a lysosomal glycogen storage disease characterized by the clinical triad of cardiomyopathy, vacuolar myopathy and mental retardation. It is often associated with an accumulation of glycogen in muscle and lysosomes.

Sequence similarities

Belongs to the LAMP family.

Post-translational modifications

O- and N-glycosylated; some of the 16 N-linked glycans are polylactosaminoglycans.

**Cellular localization** 

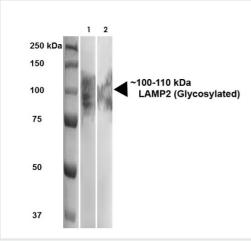
Cell membrane. Endosome membrane. Lysosome membrane. This protein shuttles between

lysosomes, endosomes, and the plasma membrane.

**Form** 

Alternative splicing produces 3 isoforms.

# **Images**



Western blot - Anti-LAMP2 antibody [GL2A7] (ab13524)



All lanes: Anti-LAMP2 antibody [GL2A7] (ab13524) at 1/500 dilution (1 hr at RT)

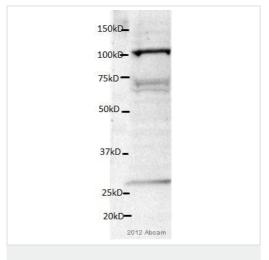
Lane 1: HeLa (Human epithelial cell line from cervix adenocarcinoma) lysate at 20 µg

Lane 2: NIH/3T3 (Mouse embryo fibroblast cell line) lysate at 10 µg

# **Secondary**

All lanes: HRP Goat Anti-Rat, 1 hour at RT at 1/100 dilution

Block: 5% milk + TBST for 1 hour at RT.



Western blot - Anti-LAMP2 antibody [GL2A7] (ab13524) This image is courtesy of an anonymous Abreview.

Anti-LAMP2 antibody [GL2A7] (ab13524) at 1/1000 dilution + HEK293 cell lysate at 20 µg

#### Secondary

Goat anti-rat HRP at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Observed band size: 105 kDa

Additional bands at: 28 kDa (possible non-specific binding), 70

kDa (possible non-specific binding)

Exposure time: 3 minutes

Blocked with 5% milk for 1 hour at RT.

Incubated with primary antibody in 5% BSA/TBST for 16 hours at 4°C.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

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