abcam

Product datasheet

Anti-L1CAM antibody [EPR23338-106] ab272733

リコンビナント RabMAb

画像数 15

製品の概要

製品名	Anti-L1CAM antibody [EPR23338-106]
製品の詳細	Rabbit monoclonal [EPR23338-106] to L1CAM
由来種	Rabbit
アプリケーション	**適用あり:** Flow Cyt, WB, IHC-Fr, ICC/IF **適用なし:** IHC-P or IP
種交差性	**交差種:** Mouse, Rat
免疫原	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
ポジティブ・コントロール	WB: Mouse brain tissue lysate; Rat brain tissue lysate; PC-12 whole cell lysate. IHC-Fr: Mouse colon, cerebellum and kidney, tissue; rat colon, cerebellum and kidney tissue. ICC/IF: PC-12, and mouse primary neuron cells. Flow cyt: PC-12, mouse primary neuron and B16-F10 cells.
特記事項	This product is a recombinant monoclonal antibody, which offers several advantages including: - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information **see here**. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.

製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
バッファー	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
精製度	Protein A purified
ポリ/モノ	モノクローナル
クローン名	EPR23338-106

アイソタイプ IgG

アプリケーション

The Abpromise guarantee **Abpromise保証は、次のテスト済みアプリケーションにおけるab272733の使用に適用されます**

アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
Flow Cyt		1/500.
WB		1/1000. Detects a band of approximately 150, 250 kDa (predicted molecular weight: 140 kDa).
IHC-Fr		1/100. Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20).
ICC/IF		1/500.

追加情報 Is unsuitable for IHC-P or IP.

ターゲット情報

機能 Cell adhesion molecule with an important role in the development of the nervous system. Involved in neuron-neuron adhesion, neurite fasciculation, outgrowth of neurites, etc. Binds to axonin on neurons.

関連疾患 Defects in L1CAM are the cause of hydrocephalus due to stenosis of the aqueduct of Sylvius (HSAS) [MIM:307000]. Hydrocephalus is a condition in which abnormal accumulation of cerebrospinal fluid in the brain causes increased intracranial pressure inside the skull. This is usually due to blockage of cerebrospinal fluid outflow in the brain ventricles or in the subarachnoid space at the base of the brain. In children is typically characterized by enlargement of the head, prominence of the forehead, brain atrophy, mental deterioration, and convulsions. In adults the syndrome includes incontinence, imbalance, and dementia. HSAS is characterized by mental retardation and enlarged brain ventricles.
Defects in L1CAM are the cause of mental retardation-aphasia-shuffling gait-adducted thumbs syndrome (MASA) [MIM:303350]; also known as corpus callosum hypoplasia, psychomotor retardation, adducted thumbs, spastic paraparesis, and hydrocephalus or CRASH syndrome. MASA is an X-linked recessive syndrome with a highly variable clinical spectrum. Main clinical features include spasticity and hyperreflexia of lower limbs, shuffling gait, mental retardation, aphasia and adducted thumbs. The features of spasticity have been referred to as complicated spastic paraplegia type 1 (SPG1). Some patients manifest corpus callosum hypoplasia and hydrocephalus. Inter- and intrafamilial variability is very wide, such that patients with hydrocephalus, MASA, SPG1, and agenesis of corpus callosum can be present within the same family.
Defects in L1CAM are the cause of spastic paraplegia X-linked type 1 (SPG1) [MIM:303350]. Spastic paraplegia is a degenerative spinal cord disorder characterized by a slow, gradual, progressive weakness and spasticity of the lower limbs.
Note=Defects in L1CAM may contribute to Hirschsprung disease by modifying the effects of Hirschsprung disease-associated genes to cause intestinal aganglionosis.

Defects in L1CAM are a cause of partial agenesis of the corpus callosum (ACCPX) [MIM:304100]. A syndrome characterized by partial corpus callosum agenesis, hypoplasia of inferior vermis and cerebellum, mental retardation, seizures and spasticity. Other features include microcephaly, unusual facies, and Hirschsprung disease in some patients.

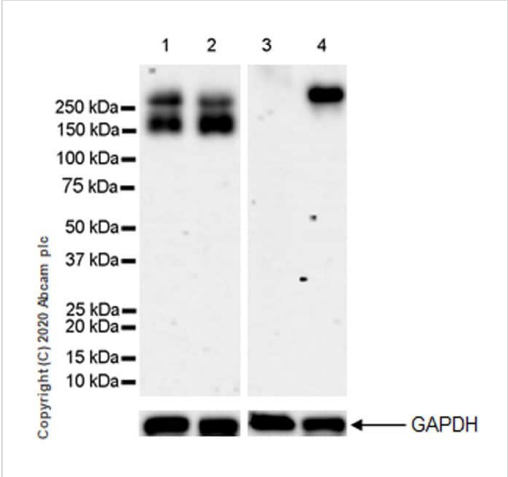
配列類似性

Belongs to the immunoglobulin superfamily. L1/neurofascin/NgCAM family.
Contains 5 fibronectin type-III domains.
Contains 6 Ig-like C2-type (immunoglobulin-like) domains.

細胞内局在

Cell membrane.

画像



Western blot - Anti-L1CAM antibody [EPR23338-106] (ab272733)

All lanes : Anti-L1CAM antibody [EPR23338-106] (ab272733) at 1/1000 dilution

Lane 1 : Mouse brain tissue lysate
Lane 2 : Rat brain tissue lysate
Lane 3 : NIH/3T3 (mouse embryonic fibroblast) whole cell lysate
Lane 4 : PC-12 (rat adrenal gland pheochromocytoma) whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (**ab97051**) at 1/20000 dilution

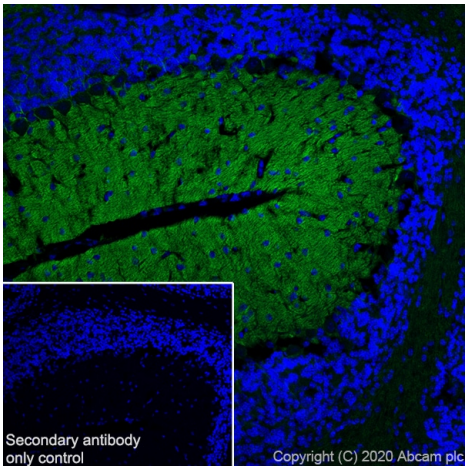
Predicted band size: 140 kDa
Observed band size: 150,250 kDa

Blocking and diluting buffer and concentration: 5% NFDM/TBST.

Negative control: NIH/3T3 (PMID: 22973895)

L1CAM is a glycoprotein. Full length 250-kDa L1CAM and cleaved 150-kDa are observed. The molecular weight observed is consistent with what have been described in literature (PMID: 20840789, PMID: 23205105).

Exposure time: 114 seconds.

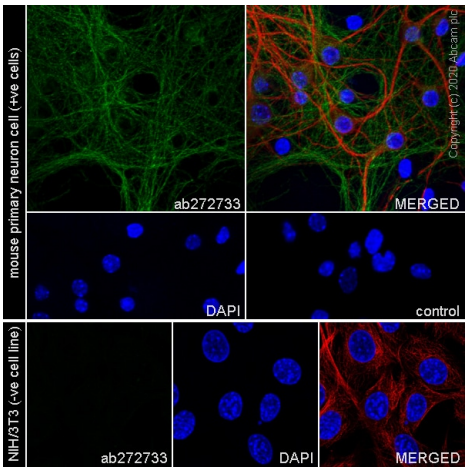


Immunohistochemistry (Frozen sections) - Anti-L1CAM antibody [EPR23338-106] (ab272733)

Immunohistochemical analysis of 4% PFA-fixed, 0.2% Triton X-100 permeabilized frozen Mouse cerebellum tissue labeling L1CAM with ab272733 at 1/500 dilution followed by **ab150077** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) at 1/1000 (2 ug/ml) dilution (Green). Positive staining on mouse cerebellum is observed. The nuclear counterstain was DAPI (Blue).

Secondary antibody control: Secondary antibody is **ab150077** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) at 1/1000 (2 ug/ml) dilution.

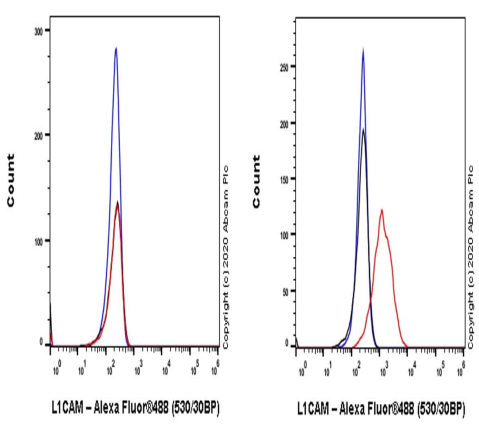
Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20).



Immunocytochemistry/ Immunofluorescence - Anti-L1CAM antibody [EPR23338-106] (ab272733)

Immunofluorescent analysis of 100% methanol-fixed mouse primary neuron cell cells labelling L1CAM with ab272733 at 1/500 dilution, followed by **ab150077** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) antibody at 1/1000 dilution (Green). Confocal image showing positive staining in mouse primary neuron cell. Confocal scanning Z step was set as 0.3 µm followed by image processing with maximum Z projection. L1CAM is specifically localized to axons, but was absent from MAP2-positive dendrites (PMID: 27001749).
Negative control: NIH/3T3 (PMID: 22973895). **ab11267** Anti-MAP2 mouse monoclonal antibody was used to counterstain dentrites at 1/500 dilution, followed by **ab150120** Goat Anti-Mouse IgG H&L (Alexa Fluor® 594) at 1/1000 dilution (Red). The Nuclear counterstain was DAPI (Blue).

Secondary antibody only control: Secondary antibody is **ab150077** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) at 1/1000 dilution.



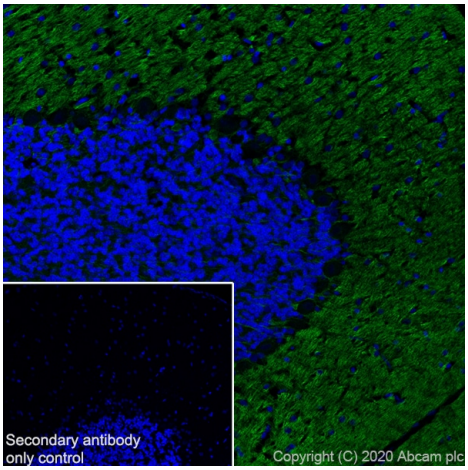
Flow Cytometry - Anti-L1CAM antibody [EPR23338-106] (ab272733)

Flow cytometric analysis of NIH/3T3 (Mouse embryonic fibroblast) (Left) / B16-F10 (Mouse melanoma mixture of spindle-shaped and epithelial-like cells)(Right) cells labelling L1CAM with ab272733 at 1/500 dilution (0.1ug) (Red) compared with a Rabbit monoclonal IgG (**ab172730**) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue).

Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) at 1/2000 dilution was used as the secondary antibody.

Negative control: NIH/3T3 (PMID: 22973895).

Gated on viable cells.

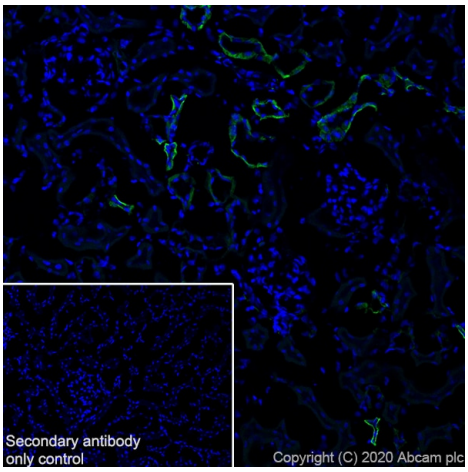


Immunohistochemistry (Frozen sections) - Anti-L1CAM antibody [EPR23338-106] (ab272733)

Immunohistochemical analysis of 4% PFA-fixed, 0.2% Triton X-100 permeabilized frozen Rat cerebellum tissue labeling L1CAM with ab272733 at 1/500 dilution followed by **ab150077** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) at 1/1000 (2 ug/ml) dilution (Green). Positive staining on rat cerebellum is observed. The nuclear counterstain was DAPI (Blue).

Secondary antibody control: Secondary antibody is **ab150077** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) at 1/1000 (2 ug/ml) dilution.

Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20).

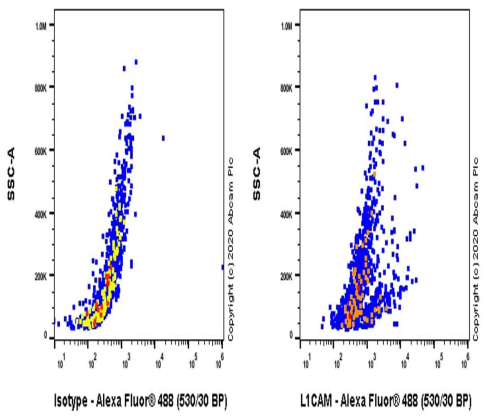


Immunohistochemistry (Frozen sections) - Anti-L1CAM antibody [EPR23338-106] (ab272733)

Immunohistochemical analysis of 4% PFA-fixed, 0.2% Triton X-100 permeabilized frozen Rat kidney tissue labeling L1CAM with ab272733 at 1/500 dilution followed by **ab150077** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) at 1/1000 (2 ug/ml) dilution (Green). Positive staining on rat kidney is observed. The nuclear counterstain was DAPI (Blue).

Secondary antibody control: Secondary antibody is **ab150077** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) at 1/1000 (2 ug/ml) dilution.

Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20).

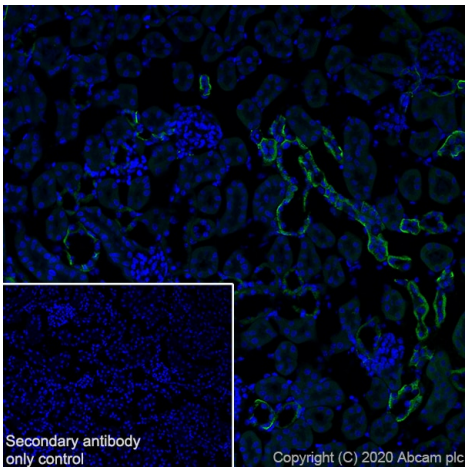


Flow Cytometry - Anti-L1CAM antibody [EPR23338-106] (ab272733)

Flow cytometric analysis of Mouse primary neuron cells cells labelling L1CAM with ab272733 at 1/500 dilution (0.1ug) (Right) compared with a Rabbit monoclonal IgG (**ab172730**) isotype control (Left).

Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) at 1/2000 dilution was used as the secondary antibody.

Gated on viable cells.

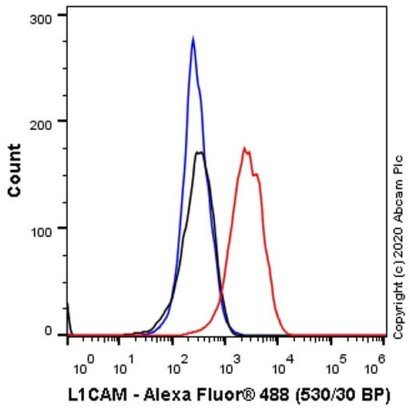


Immunohistochemistry (Frozen sections) - Anti-L1CAM antibody [EPR23338-106] (ab272733)

Immunohistochemical analysis of 4% PFA-fixed, 0.2% Triton X-100 permeabilized frozen Mouse kidney tissue labeling L1CAM with ab272733 at 1/500 dilution followed by **ab150077** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) at 1/1000 (2 ug/ml) dilution (Green). Positive staining on mouse kidney is observed. The nuclear counterstain was DAPI (Blue).

Secondary antibody control: Secondary antibody is **ab150077** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488)at 1/1000 (2 ug/ml) dilution.

Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20).

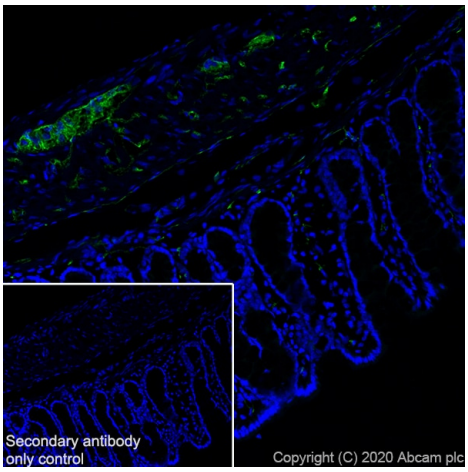


Flow Cytometry - Anti-L1CAM antibody [EPR23338-106] (ab272733)

Flow cytometric analysis of PC-12 (Rat adrenal gland pheochromocytoma) cells labelling L1CAM with ab272733 at 1/500 dilution (0.1ug) (Red) compared with a Rabbit monoclonal IgG (**ab172730**) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue).

Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) at 1/2000 dilution was used as the secondary antibody.

Gated on viable cells.

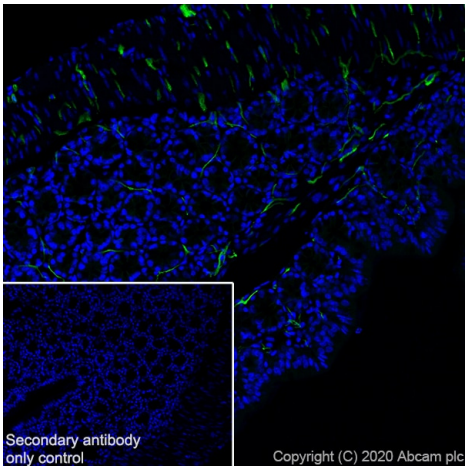


Immunohistochemistry (Frozen sections) - Anti-L1CAM antibody [EPR23338-106] (ab272733)

Immunohistochemical analysis of 4% PFA-fixed, 0.2% Triton X-100 permeabilized frozen Rat colon tissue labeling L1CAM with ab272733 at 1/500 dilution followed by **ab150077** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) at 1/1000 dilution (Green). Positive staining on rat colon is observed. The nuclear counterstain was DAPI (Blue).

Secondary antibody control: Secondary antibody is **ab150077** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488)at 1/1000 dilution.

Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20).

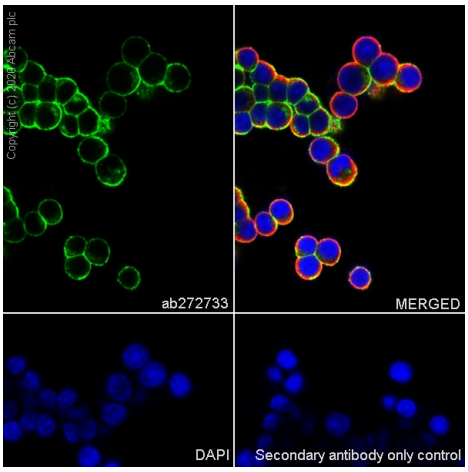


Immunohistochemistry (Frozen sections) - Anti-L1CAM antibody [EPR23338-106] (ab272733)

Immunohistochemical analysis of 4% PFA-fixed, 0.2% Triton X-100 permeabilized frozen Mouse colon tissue labeling L1CAM with ab272733 at 1/500 dilution followed by **ab150077** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) at 1/1000 dilution (Green). Positive staining on mouse colon is observed. The nuclear counterstain was DAPI (Blue).

Secondary antibody control: Secondary antibody is **ab150077** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) at 1/1000 dilution.

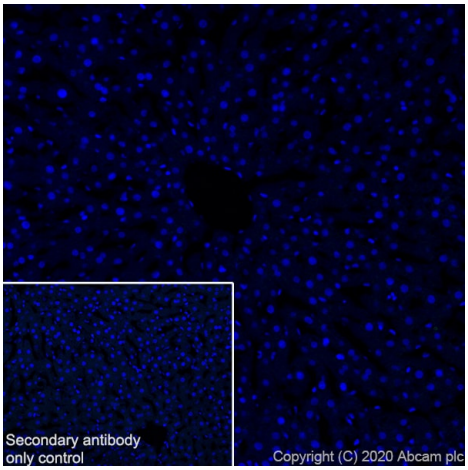
Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20).



Immunocytochemistry/ Immunofluorescence - Anti-L1CAM antibody [EPR23338-106] (ab272733)

Immunofluorescent analysis of 100% methanol-fixed PC-12 cells labelling L1CAM with ab272733 at 1/500 dilution, followed by **ab150077** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) antibody at 1/1000 dilution (Green). Confocal image showing membranous and cytoplasmic staining in PC-12 cell line. **ab195889** Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 dilution (Red). The Nuclear counterstain was DAPI (Blue).

Secondary antibody only control: Secondary antibody is **ab150077** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) at 1/1000 dilution.

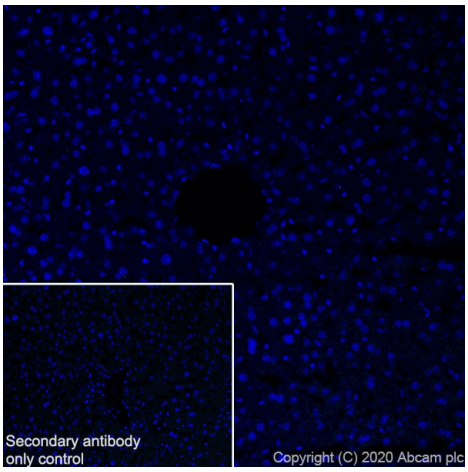


Immunohistochemistry (Frozen sections) - Anti-L1CAM antibody [EPR23338-106] (ab272733)

Immunohistochemical analysis of 4% PFA-fixed, 0.2% Triton X-100 permeabilized frozen Rat liver tissue labeling L1CAM with ab272733 at 1/100 dilution followed by **ab150077** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) at 1/1000 (2 ug/ml) dilution (Green). **Negative control:** No staining on rat liver (PMID: 22888955) is observed. The nuclear counterstain was DAPI (Blue).

Secondary antibody control: Secondary antibody is **ab150077** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) at 1/1000 (2 ug/ml) dilution.

Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20).

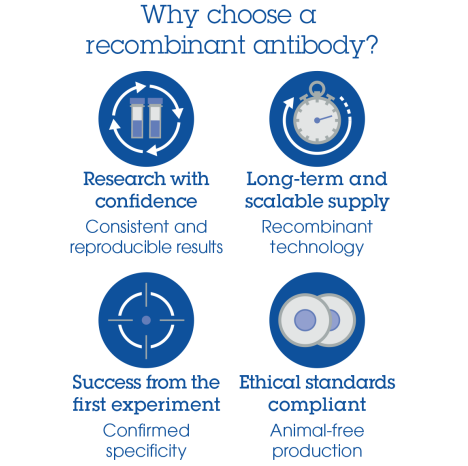


Immunohistochemistry (Frozen sections) - Anti-L1CAM antibody [EPR23338-106] (ab272733)

Immunohistochemical analysis of 4% PFA-fixed, 0.2% Triton X-100 permeabilized frozen Mouse liver tissue labeling L1CAM with ab272733 at 1/100 dilution followed by **ab150077** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) at 1/1000 (2 ug/ml) dilution (Green). **Negative control:** No staining on mouse liver (PMID: 22888955) is observed. The nuclear counterstain was DAPI (Blue).

Secondary antibody control: Secondary antibody is **ab150077** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) at 1/1000 (2 ug/ml) dilution.

Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20).



Anti-L1CAM antibody [EPR23338-106] (ab272733)

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