# abcam

## Product datasheet

## Anti-L1CAM antibody [EPR18750] ab208155





重组 RabMAb

★★★★★ 2 Abreviews 6 References 16 图像

概述

产品名称 Anti-L1CAM抗体[EPR18750]

描述 兔单克隆抗体[EPR18750] to L1CAM

宿主 Rabbit

经测试应用 适用于: WB, IHC-P, IP

种属反应性 与反应: Mouse, Rat, Human

免疫原 Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

阳性对照 WB: Human fetal brain and cerebellum lysates; HeLa and A-375 whole cell lysates; Rat brain,

> cerebellum and hippocampus lysates. Mouse cerebellum and brain lysates. IHC-P: Human kidney, Human stomach cancer, Mouse cerebrum, Mouse colon, Rat cerebellum and Rat colon

tissues. IP: Human cerebellum and Rat brain lysates.

常规说明 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**.

性能

形式

存放说明 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.

存储溶液 pH: 7.2

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol, 0.05% BSA

纯度 Protein A purified

克隆 单克隆 克隆编号 EPR18750

**同种型** IgG

#### 应用

## The Abpromise guarantee

Abpromise™承诺保证使用ab208155于以下的经测试应用

"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB	<b>★★★★</b> (1)	1/1000. Predicted molecular weight: 140 kDa.
IHC-P	*** † (1)	1/500. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
IP		1/40.

#### 靶标

#### 功能

#### 疾病相关

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.

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.

## 序列相似性

Belongs to the immunoglobulin superfamily. L1/neurofascin/NgCAM family.

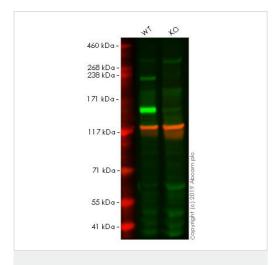
Contains 5 fibronectin type-III domains.

Contains 6 lg-like C2-type (immunoglobulin-like) domains.

细胞定位

Cell membrane.

## 图片



Western blot - Anti-L1CAM antibody [EPR18750] (ab208155)

**All lanes :** Anti-L1CAM antibody [EPR18750] (ab208155) at 1/1000 dilution

Lane 1: Wild-type HeLa cell lysate

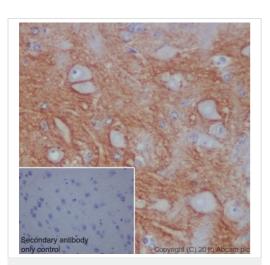
Lane 2: L1CAM knockout HeLa cell lysate

Lysates/proteins at 20 µg per lane.

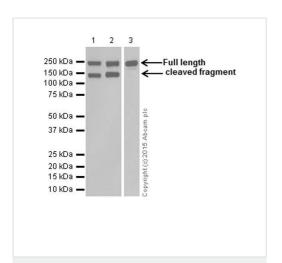
Predicted band size: 140 kDa

**Lanes 1 - 2:** Merged signal (red and green). Green - ab208155 observed at 220 kDa. Red - loading control, **ab130007** observed at 125 kDa.

ab208155 was shown to react with L1CAM in wild-type HeLa. Loss of signal was observed when knockout cell line <u>ab255401</u> (knockout cell lysate <u>ab263786</u>) was used. Wild-type and L1CAM knockout samples were subjected to SDS-PAGE. ab208155 and Anti-Vinculin antibody [VIN-54] (<u>ab130007</u>) were incubated overnight at 4<sup>A</sup>°C at 1 in 1000 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit lgG H&L (IRDye<sup>®</sup> 800CW) preadsorbed (<u>ab216773</u>) and Goat anti-Mouse lgG H&L (IRDye<sup>®</sup> 680RD) preadsorbed (<u>ab216776</u>) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-L1CAM antibody
[EPR18750] (ab208155)



Western blot - Anti-L1CAM antibody [EPR18750] (ab208155)

Immunohistochemical analysis of paraffin-embedded Mouse cerebrum tissue labeling L1CAM with ab208155 at 1/500 dilution, followed by Goat Anti-Rabbit lgG H&L (HRP) (ab97051) at 1/500 dilution.

Cytoplasm staining on the mouse cerebrum is observed. L1CAM specific staining most abundant on nervous system, distal kidney tubules, and tumor cells. [PMID: 16867862, PMID: 20044598].

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit lgG H&L (HRP) (ab97051) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

**All lanes :** Anti-L1CAM antibody [EPR18750] (ab208155) at 1/2000 dilution

Lane 1: Human fetal brain lysate

Lane 2: Human cerebellum lysate

**Lane 3 :** HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate

Lysates/proteins at 20 µg per lane.

#### Secondary

**All lanes :** Goat Anti-Rabbit IgG Peroxidase Conjugate, specific to the non-reduced form of IgG at 1/10000 dilution

Predicted band size: 140 kDa

Observed band size: 140,200-220 kDa

Blocking/Dilution buffer: 5% NFDM/TBST.

Exposure time: Lane 1 and 2: 30seconds; Lane 3: 3 minutes.

The product binds to the full length L1CAM and the 140KD fragment. Plasmin cleaves L1CAM at the FN3 repeat to produce 140 kDa and 85 kDa fragments (PMID: 7542658;PMID: 20840789). The 140 kDa fragment is where the immunogen is located.

Western blot - Anti-L1CAM antibody [EPR18750] (ab208155)

**All lanes :** Anti-L1CAM antibody [EPR18750] (ab208155) at 1/2000 dilution

Lane 1: Rat brain lysate

Lane 2: Rat cerebellum lysate

Lane 3: Rat hippocampus lysate

Lysates/proteins at 20 µg per lane.

## **Secondary**

**All lanes :** Goat Anti-Rabbit lgG H&L (HRP) (ab97051) at 1/100000 dilution

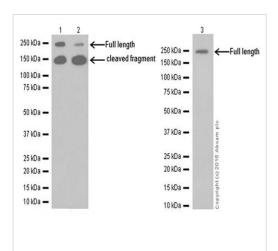
Predicted band size: 140 kDa

Observed band size: 140,200-220 kDa

Exposure time: 3 minutes

Blocking/Dilution buffer: 5% NFDM/TBST.

The product binds to the full length L1CAM and the 140KD fragment. Plasmin cleaves L1CAM at the FN3 repeat to produce 140 kDa and 85 kDa fragments (PMID: 7542658; PMID: 20840789). The 140 kDa fragment is where the immunogen is located.



Western blot - Anti-L1CAM antibody [EPR18750] (ab208155)

**All lanes :** Anti-L1CAM antibody [EPR18750] (ab208155) at 1/1000 dilution

Lane 1: Mouse cerebellum lysate

Lane 2: Mouse brain lysate

Lane 3: A-375 (Human malignant melanoma cell line) whole cell

lysate

Lysates/proteins at 10 µg per lane.

## **Secondary**

**All lanes :** Goat Anti-Rabbit lgG H&L (HRP) (<u>ab97051</u>) at 1/100000 dilution

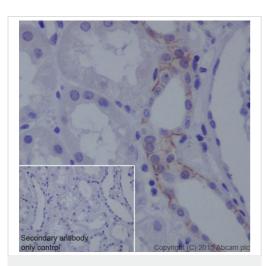
Predicted band size: 140 kDa

Observed band size: 140,200-220 kDa

Exposure time: 3 minutes

Blocking/Dilution buffer: 5% NFDM/TBST.

The product binds to the full length L1CAM and the 140KD fragment. Plasmin cleaves L1CAM at the FN3 repeat to produce 140 kDa and 85 kDa fragments (PMID: 7542658;PMID: 20840789). The 140 kDa fragment is where the immunogen is located.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-L1CAM antibody
[EPR18750] (ab208155)

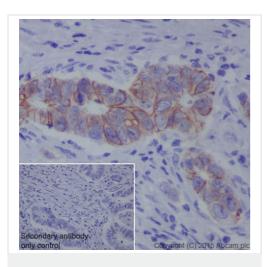
Immunohistochemical analysis of paraffin-embedded Human kidney tissue labeling L1CAM with ab208155 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

Membrane staining on a part of Human kidney tubules is observed. L1CAM specific staining most abundant on nervous system, distal kidney tubules, and tumor cells. [PMID: 16867862, PMID: 20044598].

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit lgG H&L (HRP) (ab97051) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-L1CAM antibody
[EPR18750] (ab208155)

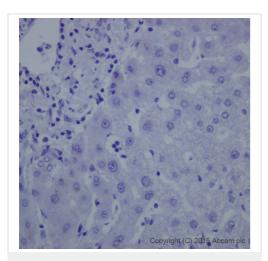
Immunohistochemical analysis of paraffin-embedded Human stomach cancer tissue labeling L1CAM with ab208155 at 1/500 dilution, followed by Goat Anti-Rabbit lgG H&L (HRP) (ab97051) at 1/500 dilution.

Membrane staining on the tumor cells of Human stomach cancer is observed

L1CAM specific staining most abundant on nervous system, distal kidney tubules, and tumor cells. [PMID: 16867862, PMID: 20044598].

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit lgG H&L (HRP) (ab97051) at 1/500 dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-L1CAM antibody
[EPR18750] (ab208155)

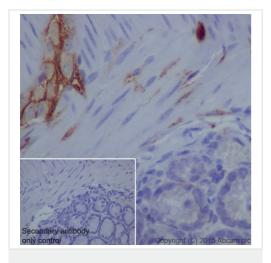
Immunohistochemical analysis of paraffin-embedded Human liver tissue labeling L1CAM with ab208155 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

Negative staining on the Human liver.

L1CAM specific staining most abundant on nervous system, distal kidney tubules, and tumor cells. [PMID: 16867862, PMID: 20044598].

Counter stained with Hematoxylin.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-L1CAM antibody
[EPR18750] (ab208155)

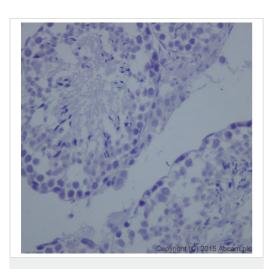
Immunohistochemical analysis of paraffin-embedded Mouse colon tissue labeling L1CAM with ab208155 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

Mainly membrane staining on the nerve tract of mouse colon is observed.

L1CAM specific staining most abundant on nervous system, distal kidney tubules, and tumor cells. [PMID: 16867862, PMID: 20044598].

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit lgG H&L (HRP) (ab97051) at 1/500 dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-L1CAM antibody
[EPR18750] (ab208155)

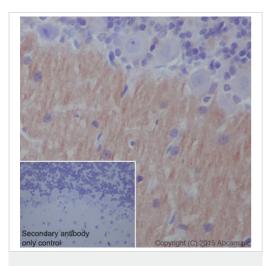
Immunohistochemical analysis of paraffin-embedded Mouse testis tissue labeling L1CAM with ab208155 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

Negative staining on the mouse testis.

L1CAM specific staining most abundant on nervous system, distal kidney tubules, and tumor cells. [PMID: 16867862, PMID: 20044598].

Counter stained with Hematoxylin.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-L1CAM antibody
[EPR18750] (ab208155)

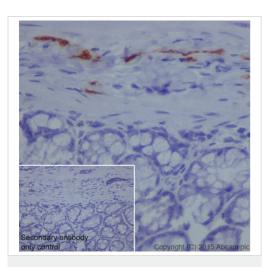
Immunohistochemical analysis of paraffin-embedded
Rat cerebellum tissue labeling L1CAM with ab208155 at 1/500
dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

Cytoplasm staining on the molecular layer of the rat cerebellar cortex is observed.

L1CAM specific staining most abundant on nervous system, distal kidney tubules, and tumor cells. [PMID: 16867862, PMID: 20044598].

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit lgG H&L (HRP) (ab97051) at 1/500 dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-L1CAM antibody
[EPR18750] (ab208155)

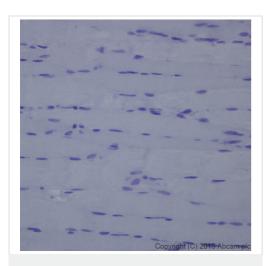
Immunohistochemical analysis of paraffin-embedded Rat colon tissue labeling L1CAM with ab208155 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

Cytoplasm staining on the nerve tract of the rat colon is observed. L1CAM specific staining most abundant on nervous system, distal kidney tubules, and tumor cells. [PMID: 16867862, PMID: 20044598].

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit lgG H&L (HRP) (ab97051) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-L1CAM antibody
[EPR18750] (ab208155)

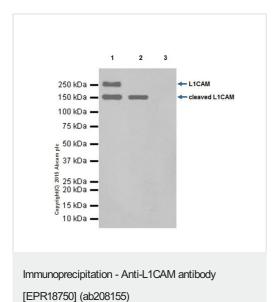
Immunohistochemical analysis of paraffin-embedded Rat skeletal muscle tissue labeling L1CAM with ab208155 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

Negative staining on the rat skeletal muscle.

L1CAM specific staining most abundant on nervous system, distal kidney tubules, and tumor cells. [PMID: 16867862, PMID: 20044598].

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is **ab97051** at 1/500 dilution.



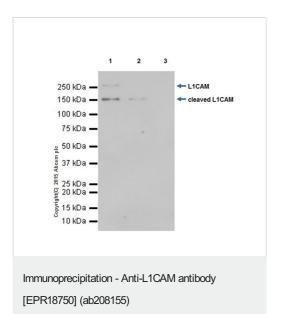
L1CAM was immunoprecipitated from 1mg of Human cerebellum lysate with ab208155 at 1/40 dilution. Western blot was performed from the immunoprecipitate using ab208155 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (ab131366), was used for detection at 1/10000 dilution.

Lane 1: Human cerebellum lysate 10µg (Input).

Lane 2: ab208155 IP in Human cerebellum lysate.

Lane 3: Rabbit monoclonal  $\lg G$  ( $\underline{ab172730}$ ) instead of ab208155 in Human cerebellum lysate.

Blocking and dilution buffer and concentration: 5% NFDM/TBST. Exposure time: 3 minutes.



L1CAM was immunoprecipitated from 1mg of Rat brain whole cell lysate with ab208155 at 1/40 dilution. Western blot was performed from the immunoprecipitate using ab208155 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (ab131366), was used for detection at 1/10000 dilution.

Lane 1: Rat brain whole cell lysate 10µg (Input).

Lane 2: ab208155 IP in Rat brain whole cell lysate.

Lane 3: Rabbit monoclonal  $\lg G$  ( $\underline{ab172730}$ ) instead of ab208155 in Rat brain whole cell lysate.

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

Exposure time: 3 minutes.



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