abcam

Product datasheet

Anti-Acid sphingomyelinase antibody [EPR23090-181] ab272729



重组 RabMAb

2 References 3 图像

概述

产品名称 Anti-Acid sphingomyelinase抗体[EPR23090-181]

描述 兔单克隆抗体[EPR23090-181] to Acid sphingomyelinase

宿主 Rabbit

适用于: WB 经测试应用

不适用于: Flow Cyt,ICC/IF,IHC-Fr,IHC-P or IP

与反应: Human 种属反应性

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

阳性对照 WB: THP-1 treated with 80nM phorbol-12-myristate-13-acetate and HepG2 whole cell lysates;

Human heart tissue lysate.

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 Liquid

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: 7.20

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

纯度 Protein A purified

克隆 单克隆

EPR23090-181 克隆编号

同种型 lgG

应用

The Abpromise guarantee

Abpromise™承诺保证使用ab272729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		1/1000. Detects a band of approximately 75 kDa (predicted molecular weight: 70 kDa).

应用说明

Is unsuitable for Flow Cyt,ICC/IF,IHC-Fr,IHC-P or IP.

靶标

功能

Converts sphingomyelin to ceramide. Also has phospholipase C activities toward 1,2-diacylglycerolphosphocholine and 1,2-diacylglycerolphosphoglycerol. Isoform 2 and isoform 3 have lost catalytic activity.

疾病相关

Defects in SMPD1 are the cause of Niemann-Pick disease type A (NPDA) [MIM:257200]; also known as Niemann-Pick disease classical infantile form. It is an early-onset lysosomal storage disorder caused by failure to hydrolyze sphingomyelin to ceramide. It results in the accumulation of sphingomyelin and other metabolically related lipids in reticuloendothelial and other cell types throughout the body, leading to cell death. Niemann-Pick disease type A is a primarily neurodegenerative disorder characterized by onset within the first year of life, mental retardation, digestive disorders, failure to thrive, major hepatosplenomegaly, and severe neurologic symptoms. The severe neurological disorders and pulmonary infections lead to an early death, often around the age of four. Clinical features are variable. A phenotypic continuum exists between type A (basic neurovisceral) and type B (purely visceral) forms of Niemann-Pick disease, and the intermediate types encompass a cluster of variants combining clinical features of both types A and B.

Defects in SMPD1 are the cause of Niemann-Pick disease type B (NPDB) [MIM:607616]; also known as Niemann-Pick disease visceral form. It is a late-onset lysosomal storage disorder caused by failure to hydrolyze sphingomyelin to ceramide. It results in the accumulation of sphingomyelin and other metabolically related lipids in reticuloendothelial and other cell types throughout the body, leading to cell death. Clinical signs involve only visceral organs. The most constant sign is hepatosplenomegaly which can be associated with pulmonary symptoms. Patients remain free of neurologic manifestations. However, a phenotypic continuum exists between type A (basic neurovisceral) and type B (purely visceral) forms of Niemann-Pick disease, and the intermediate types encompass a cluster of variants combining clinical features of both types A and B. In Niemann-Pick disease type B, onset of the first symptoms occurs in early childhood and patients can survive into adulthood.

序列相似性

Belongs to the acid sphingomyelinase family.

Contains 1 saposin B-type domain.

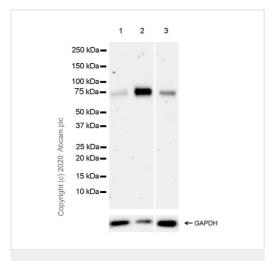
细胞定位

Lysosome.

图片



Western blot - Anti-Acid sphingomyelinase antibody [EPR23090-181] (ab272729)



Western blot - Anti-Acid sphingomyelinase antibody [EPR23090-181] (ab272729)

Anti-Acid sphingomyelinase antibody [EPR23090-181] (ab272729) at 1/500 dilution + Human heart tissue lysate at 10 μ g

Secondary

VeriBlot for IP Detection Reagent (HRP) (ab131366) at 1/1000 dilution

Predicted band size: 70 kDa **Observed band size:** 75 kDa

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

This blot was developed using a higher sensitivity ECL substrate.

Exposure time: 3 minutes.

All lanes : Anti-Acid sphingomyelinase antibody [EPR23090-181] (ab272729) at 1/1000 dilution

Lane 1 : Untreated THP-1 (human monocytic leukemia monocyte) whole cell lysate

Lane 2: THP-1 treated with 80nM phorbol-12-myristate-13-acetate (PMA) (ab120297) overnight whole cell lysate

Lane 3: HepG2 (human hepatocellular carcinoma epithelial cell) whole cell lysate

Lysates/proteins at 40 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugated (<u>ab97051</u>) at 1/50000 dilution

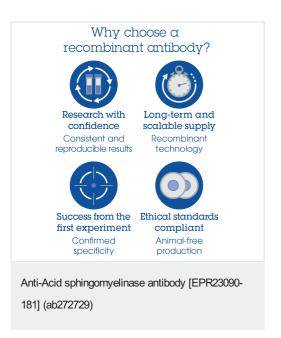
Predicted band size: 70 kDa **Observed band size:** 75 kDa

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

The molecular weight observed is consistent with what has been described in the literature (PMID: 25803076, 25853898).

ASM expression can be induced by PMA in THP-1 cells (PMID:10224156).

Exposure time: 3 minutes.



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

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