abcam

Product datasheet

Anti-EPM2A/Laforin antibody [EP7235] - BSA and Azide free ab248308

יובעדער RabMAb

画像数6

製品の概要

製品名 Anti-EPM2A/Laforin antibody [EP7235] - BSA and Azide free

製品の詳細 Rabbit monoclonal [EP7235] to EPM2A/Laforin - BSA and Azide free

由来種 Rabbit

アプリケーション 適用あり: Flow Cyt (Intra), IHC-P, ICC/IF, WB

適用なし: №

種交差性 交差種: Human

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

ポジティブ・コントロール Flow Cyt (intra): HeLa cells

特記事項 ab248308 is the carrier-free version of ab129110.

> Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cellbased assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.

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**.

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Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at +4°C. Do Not Freeze.

EP7235

バッファー pH: 7.2

Constituent: PBS

キャリア・フリー はい

精製度 Protein A purified

ポリ/モノ モノクローナル

アイソタイプ lqG

アプリケーション

クローン名

The Abpromise guarantee <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab248308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 (Intra)		Use at an assay dependent concentration.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.
ICC/IF		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Detects a band of approximately 35 kDa (predicted molecular weight: 37 kDa).

追加情報 Is unsuitable for IP.

ターゲット情報

機能 Dual specificity protein phosphatase. May be involved in the control of glycogen metabolism,

particularly in monitoring for and preventing the formation of poorly branched glycogen molecules (polyglucosans). Acts as a scaffold protein to facilitate PPP1R3C/PTG ubiquitination by NHLRC1/malin. Forms a complex with NHLRC1/malin and HSP70 and this complex suppresses

the cellular toxicity of misfolded proteins by promoting their degradation through the ubiquitin-proteasome system (UPS). Isoform 2, an inactive phosphatase, could function as a dominant-

negative regulator for the phosphatase activity of isoform 1.

組織特異性 Expressed in heart, skeletal muscle, kidney, pancreas and brain. Isoform 4 is also expressed in

the placenta.

関連疾患

Defects in EPM2A are a cause of progressive myoclonic epilepsy type 2 (EPM2) [MIM:254780]; also known as Lafora disease. EPM2 is an autosomal recessive and severe form of adolescent-onset progressive epilepsy. Typically, as seizures increase in frequency, cognitive function declines towards dementia, and affected individuals die usually within 10 years after onset. EPM2 occurs worldwide, but it is particularly common in the mediterranean countries of southern Europe and northern Africa, in southern India and in the Middle East. At the cellular level, it is characterized by accumulation of starch-like polyglucosans called Lafora bodies (LBs) that are most abundant in organs with the highest glucose metabolism: brain, heart, liver and skeletal muscle. Among other conditions involving polyglucosans, EPM2 is unique in that the inclusions are in neuronal dendrites but not axons and the forming polyglucosan fibrils are associated with the endoplasmic reticulum.

配列類似性

Belongs to the protein-tyrosine phosphatase family.

Contains 1 CBM20 (carbohydrate binding type-20) domain.

Contains 1 tyrosine-protein phosphatase domain.

翻訳後修飾

Polyubiquitinated by NHLRC1/malin.

Phosphorylation on Ser-25 by AMPK affects the phosphatase activity of the enzyme and its ability

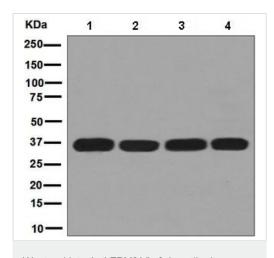
to homodimerize and interact with NHLRC1, PPP1R3C or PRKAA2.

細胞内局在

Cytoplasm; Cytoplasm. Nucleus; Endoplasmic reticulum. Cell membrane. Nucleus. Also found in the nucleus; Endoplasmic reticulum. Cell membrane. Primarily associated with polyribosomes at the endoplasmic reticulum, also found at the plasma membrane and Cytoplasm. Under

glycogenolytic conditions localizes to the nucleus.

画像



Western blot - Anti-EPM2A/Laforin antibody [EP7235] - BSA and Azide free (ab248308) **All lanes :** Anti-EPM2A/Laforin antibody [EP7235] (**ab129110**) at 1/100 dilution

Lane 1: Human fetal heart tissue lysate

Lane 2 : HeLa cell lysate

Lane 3 : 293T cell lysate

Lane 4: Human fetal muscle tissue lysate

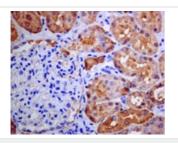
Lysates/proteins at 10 µg per lane.

Secondary

All lanes: Goat anti-Rabbit HRP at 1/2000 dilution

Predicted band size: 37 kDa

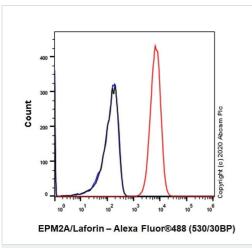
This data was developed using <u>ab129110</u>, the same antibody clone in a different buffer formulation.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-EPM2A/Laforin antibody

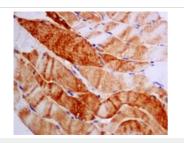
[EP7235] - BSA and Azide free (ab248308)

This data was developed using <u>ab129110</u>, the same antibody clone in a different buffer formulation.<u>ab129110</u>, at 1/100 dilution, staining EPM2A/Laforin in Paraffin-embedded Human kidney tissue by Immunohistochemistry. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



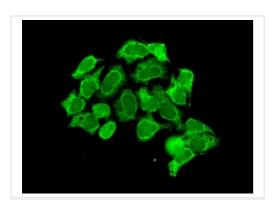
Flow Cytometry (Intracellular) - Anti-EPM2A/Laforin antibody [EP7235] - BSA and Azide free (ab248308)

This data was developed using <u>ab129110</u>, the same antibody clone in a different buffer formulation. Intracellular Flow Cytometry analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling EPM2A/Laforin with purified <u>ab129110</u> at 1/100 dilution (10 µg/mL) (Red). Cells were fixed with 4% Paraformaldehyde and permeabilised with 90% Methanol. A Goat anti rabbit IgG (Alexa Fluor[®] 488, <u>ab150077</u>) secondary antibody was used at 1/2000. Isotype control - Rabbit monoclonal IgG (Black). Unlabeled control - Cells without incubation with primary antibody and secondary antibody (Blue).

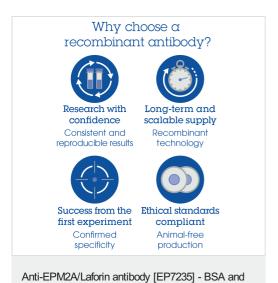


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-EPM2A/Laforin antibody
[EP7235] - BSA and Azide free (ab248308)

This data was developed using **ab129110**, the same antibody clone in a different buffer formulation.**ab129110**, at 1/100 dilution, staining EPM2A/Laforin in Paraffin-embedded Human muscle tissue by Immunohistochemistry. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunocytochemistry/ Immunofluorescence - Anti-EPM2A/Laforin antibody [EP7235] - BSA and Azide free (ab248308) This data was developed using <u>ab129110</u>, the same antibody clone in a different buffer formulation.<u>ab129110</u>, at 1/100 dilution, staining EPM2A/Laforin in HeLa cells by Immunofluorescence.



Azide free (ab248308)

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