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Product datasheet

Anti-ENPP2/ATX antibody [1F8] ab77104



10 References 画像数 4

製品の概要

製品名 Anti-ENPP2/ATX antibody [1F8]

製品の詳細 Mouse monoclonal [1F8] to ENPP2/ATX

由来種 Mouse

アプリケーション 適用あり: IHC-P, WB

適用なし: ICC

種交差性 交差種: Human

交差が予測される動物種: Mouse 🕰

免疫原 Recombinant full length protein corresponding to Human ENPP2/ATX.

ポジティブ・コントロール WB: HEK293 whole cell lysate and in the following human tissue lysates: kidney; placenta; ovary;

small intestine. IHC: human tonsil paraffin sections.

特記事項 This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or

conjugation for your experiments, please contact orders@abcam.com.

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

製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw

cycles.

バッファー pH: 7.40

Preservative: 0.02% Sodium azide Constituents: PBS, 6.97% L-Arginine

精製度 Protein G purified

1

ポリ/モノ モノクローナル

ウローン名 1F8 **アイソタイプ** lqG1

アプリケーション

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ab77104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
IHC-P		Use a concentration of 1 µg/ml.
WB		Use a concentration of 1 µg/ml. Detects a band of approximately 100 kDa (predicted molecular weight: 99 kDa).

追加情報 Is unsuitable for ICC.

ターゲット情報

機能

Hydrolyzes lysophospholipids to produce lysophosphatidic acid (LPA) in extracellular fluids. Major substrate is lysophosphatidylcholine. Also can act on sphingosylphosphphorylcholine producing sphingosine-1-phosphate, a modulator of cell motility. Can hydrolyze, in vitro, bis-pNPP, to some extent pNP-TMP, and barely ATP. Involved in several motility-related processes such as angiogenesis and neurite outgrowth. Acts as an angiogenic factor by stimulating migration of smooth muscle cells and microtubule formation. Stimulates migration of melanoma cells, probably via a pertussis toxin-sensitive G protein. May have a role in induction of parturition. Possible involvement in cell proliferation and adipose tissue development. Tumor cell motility-stimulating factor.

組織特異性

Predominantly expressed in brain, placenta, ovary, and small intestine. Expressed in a number of carcinomas such as hepatocellular and prostate carcinoma, neuroblastoma and non-small-cell lung cancer. Expressed in body fluids such as plasma, cerebral spinal fluid (CSF), saliva, follicular and amniotic fluids. Not detected in leukocytes. Isoform 1 is more highly expressed in peripheral tissues than in the central nervous system (CNS). Adipocytes only express isoform 1. Isoform 3 is more highly expressed in the brain than in peripheral tissues.

配列類似性

Belongs to the nucleotide pyrophosphatase/phosphodiesterase family.

Contains 2 SMB (somatomedin-B) domains.

翻訳後修飾

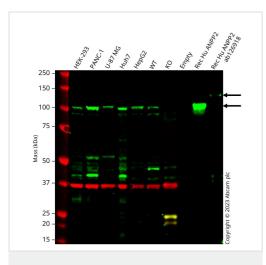
N-glycosylation, but not furin-cleavage, plays a critical role on secretion and on lysoPLD activity.

細胞内局在

Secreted. Secreted by most body fluids including serum and CSF. Also by adipocytes and

numerous cancer cells.

画像



Western blot - Anti-ENPP2/ATX antibody [1F8] (ab77104)

All lanes : Anti-ENPP2/ATX antibody [1F8] (ab77104) at 1/1000 dilution

Lane 1: HEK-293 cell lysate at 20 μg Lane 2: PANC-1 cell lysate at 20 μg Lane 3: U-87 MG cell lysate at 20 μg Lane 4: Huh7 cell lysate at 20 μg Lane 5: HepG2 cell lysate at 20 μg

Lane 6 : Wild Type HeLa cell lysate at 20 μg

Lane 7: ENPP2 knockout HeLa cell lysate at 20 µg

Lane 8: Empty cell lysate at 0 µg

Lane 9 : Recombinant Human ENPP-2/Autotaxin Protein, CF cell

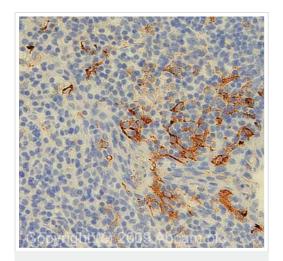
lysate at 0.5 µg

Lane 10 : Recombinant Human ENPP2/ATX Protein <u>ab126918</u> cell lysate at 0.5 µg

Performed under reducing conditions.

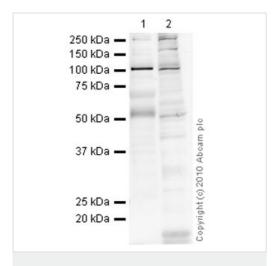
Predicted band size: 99 kDa **Observed band size:** 105 kDa

Anti-ENPP2 antibody [1F8] (ab77104) staining at 1/1000 dilution, shown in green; Rabbit Anti-GAPDH antibody [EPR16891] (ab181602) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab77104 was shown to bind specifically to ENPP2. A band was observed at 105 kDa in wild-type HEK-293 cell lysates with no signal observed at this size in ENPP2 knockout cell line. To generate this image, wild-type and ENPP2 knockout HEK-293 cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 3 % milk in TBS-0.1 % Tween[®] 20 (TBS-T) before incubation with primary antibodies overnight at 4 °C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Mouse IgG H&L 800CW and Goat anti-Rabbit IgG H&L 680RD at 1/20000 dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-ENPP2/ATX antibody [1F8] (ab77104)

IHC image of ENPP2/ATX staining in Human Tonsil FFPE section, performed on a BondTM system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab77104, 1µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX



Western blot - Anti-ENPP2/ATX antibody [1F8] (ab77104)

All lanes: Anti-ENPP2/ATX antibody [1F8] (ab77104) at 10 µg/ml

Lane 1: Human kidney tissue lysate - total protein (ab30203)

Lane 2 : HEK293 (Human embryonic kidney cell line) Whole Cell

Lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat polyclonal to Mouse lgG - H&L - Pre-Adsorbed

(HRP) at 1/3000 dilution

Developed using the ECL technique.

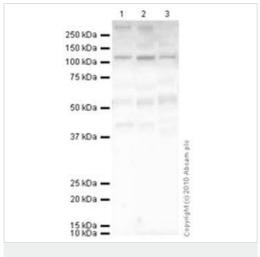
Performed under reducing conditions.

Predicted band size: 99 kDa **Observed band size:** 100 kDa

Additional bands at: 180 kDa, 250 kDa, 50 kDa, 65 kDa. We are

unsure as to the identity of these extra bands.

Exposure time: 20 minutes



Western blot - Anti-ENPP2/ATX antibody [1F8] (ab77104)

All lanes: Anti-ENPP2/ATX antibody [1F8] (ab77104) at 10 µg/ml

Lane 1: Human placenta tissue lysate - total protein (ab29745)

Lane 2: Human ovary tissue lysate - total protein (ab30222)

Lane 3: Human small intestine tissue lysate - total protein

(ab29276)

Lysates/proteins at 20 µg per lane.

Secondary

All lanes: Mouse IgG - H&L - Pre-Adsorbed (HRP) at 1/3000

dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 99 kDa **Observed band size:** 110 kDa

Additional bands at: 300 kDa, 40 kDa, 55 kDa. We are unsure as

to the identity of these extra bands.

Exposure time: 20 minutes

ENPP2/ATX contains three potential glycosylation sites (SwissProt), which might explain its migration at a higher molecular weight than predicted.

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