abcam

Product datasheet

Anti-IP3 receptor antibody [EPR4536] - BSA and Azide free ab248112



リコンピナント

RabMAb

画像数 5

製品の概要

製品名 Anti-IP3 receptor antibody [EPR4536] - BSA and Azide free

製品の詳細 Rabbit monoclonal [EPR4536] to IP3 receptor - BSA and Azide free

由来種 Rabbit

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

適用なし: №

種交差性 交差種: Human

非交差種: Mouse, Rat

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

特記事項 ab248112 is the carrier-free version of ab125076.

Our <u>carrier-free</u> 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 cell-based 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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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.

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 **ウローン名** EPR4536

アイソタイプ IgG

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ab248112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 at an assay dependent concentration. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
Flow Cyt (Intra)		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Detects a band of approximately 320 kDa (predicted molecular weight: 314 kDa).

追加情報 Is unsuitable for IP.

ターゲット情報

機能 Intracellular channel that mediates calcium release from the endoplasmic reticulum following

stimulation by inositol 1,4,5-trisphosphate.

組織特異性 Widely expressed.

関連疾患 Defects in ITPR1 are the cause of spinocerebellar ataxia type 15 (SCA15) (SCA15)

[MIM:606658]. Spinocerebellar ataxia is a clinically and genetically heterogeneous group of

cerebellar disorders. Patients show progressive incoordination of gait and often poor

coordination of hands, speech and eye movements, due to degeneration of the cerebellum with variable involvement of the brainstem and spinal cord. SCA15 is an autosomal dominant cerebellar ataxia (ADCA). It is very slow progressing form with a wide range of onset, ranging

from childhood to adult. Most patients remain ambulatory.

配列類似性 Belongs to the InsP3 receptor family.

Contains 5 MIR domains.

ドメイン The receptor contains a calcium channel in its C-terminal extremity. Its large N-terminal

cytoplasmic region has the ligand-binding site in the N-terminus and modulatory sites in the

middle portion immediately upstream of the channel region.

翻訳後修飾

Phosphorylated by cAMP kinase. Phosphorylation prevents the ligand-induced opening of the

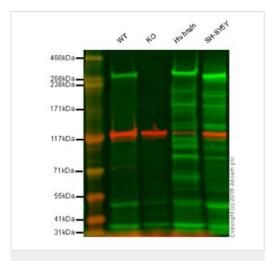
calcium channels.

Phosphorylated on tyrosine residues.

細胞内局在

Endoplasmic reticulum membrane.

画像



Western blot - Anti-IP3 receptor antibody [EPR4536] - BSA and Azide free (ab248112)

This data was developed using <u>ab125076</u>, the same antibody clone in a different buffer formulation.

Lane 1: Wild-type HAP1 cell lysate (20 µg)

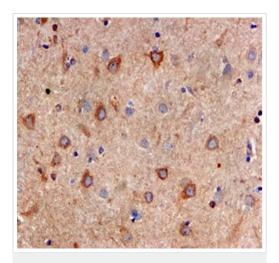
Lane 2: IP3 receptor knockout HAP1 cell lysate (20 µg)

Lane 3: Human brain tissue lysate (20 µg)

Lane 4: SH-SY5Y cell lysate (20 µg)

Lanes 1 - 4: Merged signal (red and green). Green - <u>ab125076</u> observed at 270 kDa. Red - loading control, <u>ab18058</u>, observed at 124 kDa.

<u>ab125076</u> was shown to specifically recognize IP3 receptor in wild-type HAP1 cells along with additional cross-reactive bands. No band was observed when IP3 receptor knockout samples were examined. Wild-type and IP3 receptor knockout samples were subjected to SDS-PAGE. <u>ab125076</u> and <u>ab18058</u> (loading control to Vinculin) were diluted 1/1000 and 1/10,000 respectively and incubated overnight at 4°C. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye[®] 800CW) preadsorbed (<u>ab216773</u>) and Goat anti-Mouse IgG H&L (IRDye[®] 680RD) preadsorbed (<u>ab216776</u>) secondary antibodies at 1/10,000 dilution for 1 hour at room temperature before imaging.

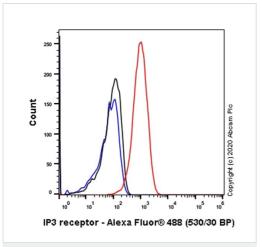


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-IP3 receptor antibody

[EPR4536] - BSA and Azide free (ab248112)

This data was developed using <u>ab125076</u>, the same antibody clone in a different buffer formulation.

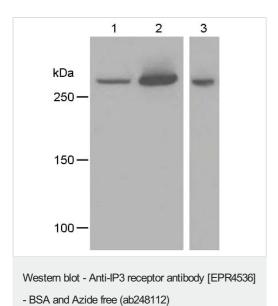
<u>ab125076</u>, at 1/50, staining ITPR1 in paraffin-embedded Human brain tissue by immunohistochemistry. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Flow Cytometry (Intracellular) - Anti-IP3 receptor antibody [EPR4536] - BSA and Azide free (ab248112)

This data was developed using <u>ab125076</u>, the same antibody clone in a different buffer formulation.

Flow Cytometry analysis of SH-SY5Y (Human neuroblastoma epithelial cell) cells labeling IP3 receptor with purified <u>ab125076</u> at 1/500 dilution (1 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 - Cell without incubation with primary antibody and secondary antibody (Blue).



All lanes : Anti-IP3 receptor antibody [EPR4536] (**ab125076**) at 1/1000 dilution

Lane 1: SH-SY5Y cell lysate

Lane 2 : HeLa cell lysate

Lane 3 : HuT78 cell lysate

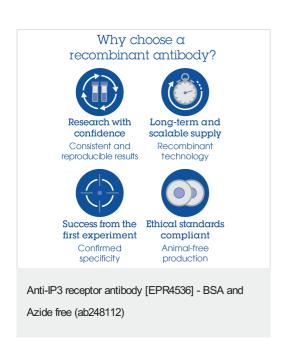
Lysates/proteins at 10 µg per lane.

Secondary

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

Predicted band size: 314 kDa

This data was developed using <u>ab125076</u>, the same antibody clone in a different buffer formulation.



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