abcam

Product datasheet

Anti-Monoamine Oxidase A/MAO-A antibody [EPR7101] - BSA and Azide free ab240031



ועלטעבע RabMAb

画像数 10

製品の概要

製品名

製品の詳細

由来種

アプリケーション

種交差性

免疫原

ポジティブ・コントロール

特記事項

Anti-Monoamine Oxidase A/MAO-A antibody [EPR7101] - BSA and Azide free

Rabbit monoclonal [EPR7101] to Monoamine Oxidase A/MAO-A - BSA and Azide free

Rabbit

適用あり: Flow Cyt (Intra), ICC/IF, IHC-P, WB

交差種: Mouse, Rat, Human

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

IHC-P: human hepatocellular carcinoma, mouse liver, and rat liver tissues. ICC/IF: HepG2 cells.

ab240031 is the carrier-free version of ab126751.

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.

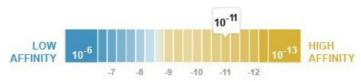
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb** patents.

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.

解離定数(K_D 値) $K_D = 5.10 \times 10^{-11} M$



Learn more about K_D

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

クローン名 EPR7101

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ab240031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.
ICC/IF		Use at an assay dependent concentration.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. See IHC antigen retrieval protocols.
WB		Use at an assay dependent concentration. Predicted molecular weight: 60 kDa.

ターゲット情報

機能 Catalyzes the oxidative deamination of biogenic and xenobiotic amines and has important

functions in the metabolism of neuroactive and vasoactive amines in the central nervous system

and peripheral tissues. MAOA preferentially oxidizes biogenic amines such as 5-

hydroxytryptamine (5-HT), norepinephrine and epinephrine.

組織特異性 Heart, liver, duodenum, blood vessels and kidney.

関連疾患 Defects in MAOA are the cause of Brunner syndrome (BRUNS) [MIM:300615]. Brunner syndrome

is a form of X-linked non-dysmorphic mild mental retardation. Male patients are affected by a

syndrome of borderline mental retardation and exhibit abnormal behavior, including disturbed regulation of impulsive aggression. Obligate female carriers have normal intelligence and behavior.

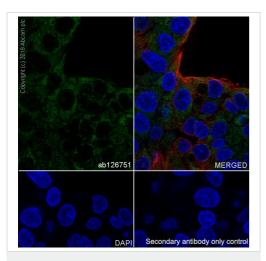
配列類似性

細胞内局在

Belongs to the flavin monoamine oxidase family.

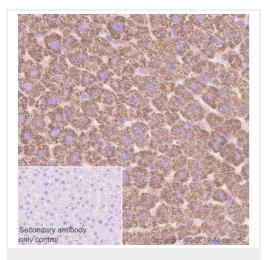
Mitochondrion outer membrane.

画像



Immunocytochemistry/ Immunofluorescence - Anti-Monoamine Oxidase A/MAO-A antibody [EPR7101] - BSA and Azide free (ab240031) Immunocytochemistry/ Immunofluorescence analysis of HepG2 (Human hepatocellular carcinoma epithelial cell) cells labeling Monoamine Oxidase A/MAO-A with Purified $\underline{ab126751}$ at 1:100 dilution (1.5 µg/ml). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Cells were counterstained with Ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1:200 (2.5 µg/ml). Goat anti rabbit lgG (Alexa Fluor® 488, $\underline{ab150077}$) was used as the secondary antibody at 1:1000 (2 µg/ml) dilution. DAPI (blue) was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.

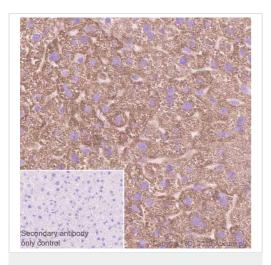
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab126751)



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Monoamine Oxidase
A/MAO-A antibody [EPR7101] - BSA and Azide free
(ab240031)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of rat liver tissue sections labeling Monoamine Oxidase A/MAO-A with Purified <u>ab126751</u> at 1:400 dilution (0.38 µg/ml). Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0). Rabbit specific IHC polymer detection kit HRP/DAB (<u>ab209101</u>) was used for detection. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.

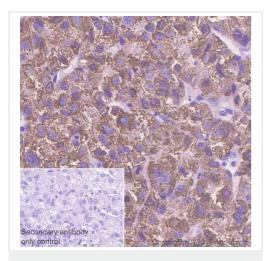
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab126751)



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Monoamine Oxidase
A/MAO-A antibody [EPR7101] - BSA and Azide free
(ab240031)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse liver tissue sections labeling Monoamine Oxidase A/MAO-A with Purified <u>ab126751</u> at 1:400 dilution (0.38 µg/ml). Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0). Rabbit specific IHC polymer detection kit HRP/DAB (<u>ab209101</u>) was used for detection. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.

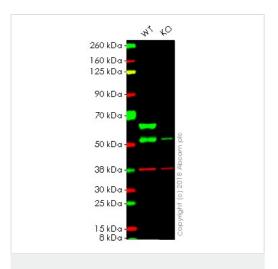
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab126751)



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Monoamine Oxidase
A/MAO-A antibody [EPR7101] - BSA and Azide free
(ab240031)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human hepatocellular carcinoma tissue sections labeling Monoamine Oxidase A/MAO-A with Purified ab126751 at 1:400 dilution (0.38 µg/ml). Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0). Rabbit specific IHC polymer detection kit HRP/DAB (ab209101) was used for detection. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab126751)



Western blot - Anti-Monoamine Oxidase A/MAO-A antibody [EPR7101] - BSA and Azide free (ab240031)

All lanes : Anti-Monoamine Oxidase A/MAO-A antibody [EPR7101] (ab126751) at 1/1000 dilution

Lane 1: Wild-type HAP1 whole cell lysate

Lane 2 : MAOA (Monoamine Oxidase A) knockout HAP1 whole cell lysate

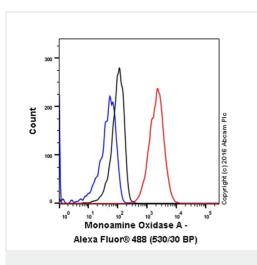
Lysates/proteins at 20 µg per lane.

Predicted band size: 60 kDa

Lanes 1 - 2: Merged signal (red and green). Green - <u>ab126751</u> observed at 60 kDa. Red - loading control, <u>ab8245</u>, observed at 38 kDa.

ab126751 was shown to recognize Monoamine Oxidase A in wild-type HAP1 cells as signal was lost at the expected MW in MAOA (Monoamine Oxidase A) knockout cells. Additional cross-reactive bands were observed in the wild-type and knockout cells. Wild-type and MAOA (Monoamine Oxidase A) knockout samples were subjected to SDS-PAGE. Ab126751 and ab8245 (Mouse anti-GAPDH loading control) were incubated overnight at 4°C at 1/1000 dilution and 1/20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed ab216773 and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed ab216776 secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab126751</u>).



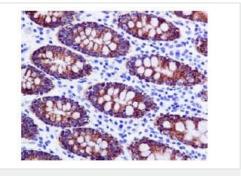
Flow Cytometry (Intracellular) - Anti-Monoamine
Oxidase A/MAO-A antibody [EPR7101] - BSA and
Azide free (ab240031)

<u>ab126751</u> (purified) staining Monoamine Oxidase A/MAO-A in the human cell line HepG2 (human hepatocellular carcinoma) by intracellular flow cytometry. Cells were fixed with 4% paraformaldehyde and the sample was incubated with the primary antibody at a dilution of 1/20. A goat anti rabbit lgG (Alexa Fluor[®] 488) at a dilution of 1/2000 was used as the secondary antibody.

Isoytype control: Rabbit monoclonal IgG (Black)

Unlabelled control: Cell without incubation with primary antibody and secondary antibody (Blue)

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab126751).

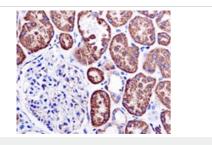


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Monoamine Oxidase
A/MAO-A antibody [EPR7101] - BSA and Azide free
(ab240031)

<u>ab126751</u> (unpurified), at 1/50 dilution, staining Monoamine Oxidase A/MAO-A in paraffin embedded Human colon tissue by Immunohistochemistry.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab126751).

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

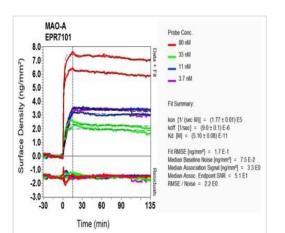


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Monoamine Oxidase
A/MAO-A antibody [EPR7101] - BSA and Azide free (ab240031)

<u>ab126751</u> (unpurified), at 1/50 dilution, staining Monoamine Oxidase A/MAO-A in paraffin embedded Human kidney tissue by Immunohistochemistry.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab126751</u>).

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



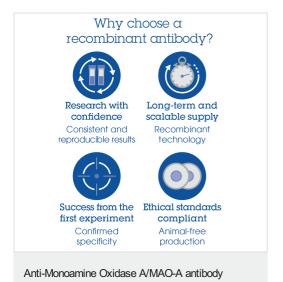
Ol-RD Scanning - Anti-Monoamine Oxidase A/MAO-A antibody [EPR7101] - BSA and Azide free (ab240031)

Equilibrium disassociation constant (K_D)

Click here to learn more about K_D

Learn more about K_D

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab126751).



[EPR7101] - BSA and Azide free (ab240031)

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