abcam

Product datasheet

Anti-Mitofusin 2 antibody [NIAR164] ab124773

リコンビナント RabMAb

6 Abreviews 74 References 画像数 7

製品の概要

製品名	Anti-Mitofusin 2 antibody [NIAR164]
製品の詳細	Rabbit monoclonal [NIAR164] to Mitofusin 2
由来種	Rabbit
アプリケーション	**適用あり:** WB, IHC-P, ICC/IF
種交差性	**交差種:** Mouse, Rat, Human
免疫原	Synthetic peptide within Human Mitofusin 2. The exact sequence is proprietary. Database link: **O95140**
ポジティブ・コントロール	WB: Mouse brain lysate, mouse kidney lysate, rat brain lysate, HeLa cell lysate, Jurkat cell lysate, HEK293 cell lysate, Raji cell lysate, rat primary neurons cell lysate. ICC/IF: HEK293 cells. IHC-P: Human kidney tissue.
特記事項	This Mitofusin 2 antibody (ab124773) was developed as part of a collaboration between the National Institutes of Health and the lab of Paritosh Ghosh. 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 short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Stable for 12 months at -20°C.
バッファー	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 40% Glycerol (glycerin, glycerine), 0.05% BSA, 59% PBS

精製度	Protein A purified
ポリ/モノ	モノクローナル
クローン名	NIAR164
アイソタイプ	IgG

アプリケーション

The Abpromise guarantee **Abpromise保証は、次のテスト済みアプリケーションにおけるab124773の使用に適用されます**

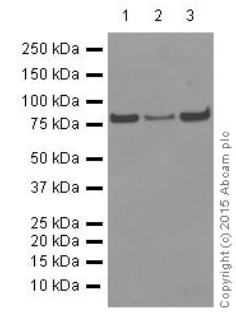
アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
WB	★★★★★ (5)	1/1000 - 1/10000. Detects a band of approximately 80 kDa (predicted molecular weight: 86 kDa).
IHC-P		1/50 - 1/100. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. See **IHC antigen retrieval protocols**.
ICC/IF	★★★☆☆ (1)	1/300. **For unpurified, use 1/100 - 1/250.**

ターゲット情報

機能	Essential transmembrane GTPase, which mediates mitochondrial fusion. Fusion of mitochondria occurs in many cell types and constitutes an important step in mitochondria morphology, which is balanced between fusion and fission. MFN2 acts independently of the cytoskeleton. It therefore plays a central role in mitochondrial metabolism and may be associated with obesity and/or apoptosis processes. Overexpression induces the formation of mitochondrial networks. Plays an important role in the regulation of vascular smooth muscle cell proliferation. Involved in the clearance of damaged mitochondria via selective autophagy (mitophagy). Is required for PARK2 recruitment to dysfunctional mitochondria. Involved in the control of unfolded protein response (UPR) upon ER stress including activation of apoptosis and autophagy during ER stress. Acts as an upstream regulator of EIF2AK3 and suppresses EIF2AK3 activation under basal conditions.
組織特異性	Ubiquitous; expressed at low level. Highly expressed in heart and kidney.
関連疾患	Charcot-Marie-Tooth disease 2A2 Neuropathy, hereditary motor and sensory, 6A
配列類似性	Belongs to the TRAFAC class dynamin-like GTPase superfamily. Dynamin/Fzo/YdjA family. Mitofusin subfamily. Contains 1 dynamin-type G (guanine nucleotide-binding) domain.
翻訳後修飾	Phosphorylated by PINK1. Ubiquitinated by non-degradative ubiquitin by PARK2, promoting mitochondrial fusion; deubiquitination by USP30 inhibits mitochondrial fusion.
細胞内局在	Mitochondrion outer membrane. Colocalizes with BAX during apoptosis.

画像



Western blot - Anti-Mitofusin 2 antibody [NIAR164] (ab124773)

All lanes : Anti-Mitofusin 2 antibody [NIAR164] (ab124773) at 1/5000 dilution (purified)

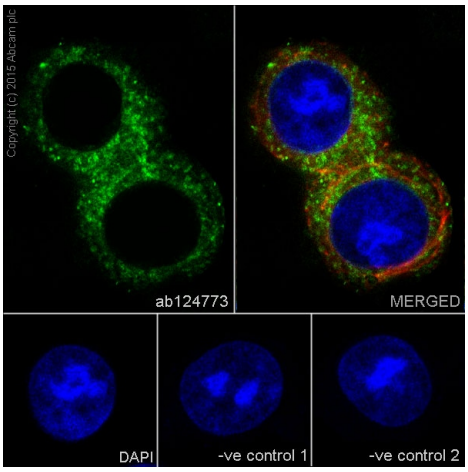
Lane 1 : mouse brain lysate
Lane 2 : mouse kidney lysate
Lane 3 : rat brain lysate

Lysates/proteins at 20 µg per lane.

Secondary
All lanes : HRP goat anti-rabbit IgG (H+L) at 1/50000 dilution

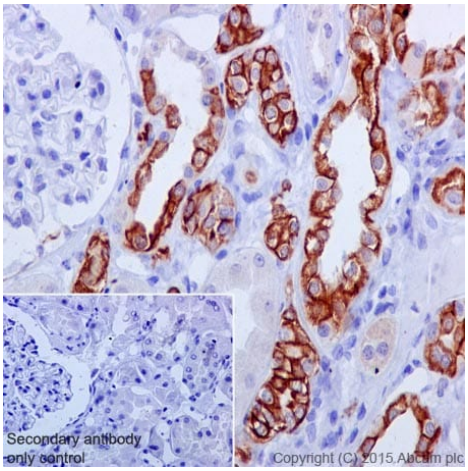
Predicted band size: 86 kDa
Observed band size: 80 kDa

Blocking buffer: 5% NFDM/TBST
Dilution buffer: 5% NFDM/TBST



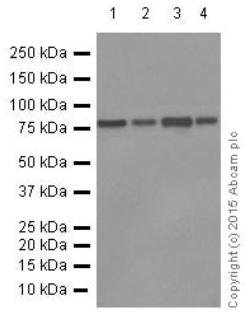
Immunocytochemistry/ Immunofluorescence - Anti-Mitofusin 2 antibody [NIAR164] (ab124773)

Immunofluorescence staining of HEK293 cells with purified ab124773 at a working dilution of 1/300, counter-stained with DAPI. The secondary antibody was Alexa Fluor® 488 goat anti-rabbit (**ab150077**), used at a dilution of 1/1000. **ab7291**, a mouse anti-tubulin antibody (1/1000), was used to stain tubulin along with **ab150120** (Alexa Fluor® 594 goat anti-mouse, 1/1000), shown in the top right hand panel. The cells were fixed in 100% methanol and permeabilized using 0.1% Triton X 100. The negative controls are shown in bottom middle and right hand panels - for negative control 1, purified ab124773 was used at a dilution of 1/500 followed by an Alexa Fluor® 594 goat anti-mouse antibody (**ab150120**) at a dilution of 1/500. For negative control 2, **ab7291** (mouse anti-tubulin) was used at a dilution of 1/500 followed by an Alexa Fluor® 488 goat anti-rabbit antibody (**ab150077**) at a dilution of 1/400.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Mitofusin 2 antibody [NIAR164] (ab124773)

Immunohistochemical staining of paraffin embedded human kidney with purified ab124773 at a working dilution of 1/300. The secondary antibody used is HRP goat anti-rabbit IgG H&L (**ab97051**) at 1/500. The sample is counter-stained with hematoxylin. Antigen retrieval was perfomed using Tris-EDTA buffer, pH 9.0. PBS was used instead of the primary antibody as the negative control, and is shown in the inset.



Western blot - Anti-Mitofusin 2 antibody [NIAR164] (ab124773)

All lanes : Anti-Mitofusin 2 antibody [NIAR164] (ab124773) at 1/5000 dilution (purified)

Lane 1 : HeLa cell lysate
Lane 2 : Jurkat cell lysate
Lane 3 : HEK293 cell lysate
Lane 4 : Raji cell lysate

Lysates/proteins at 20 µg per lane.

Secondary
All lanes : HRP goat anti-rabbit IgG (H+L) at 1/50000 dilution

Predicted band size: 86 kDa
Observed band size: 80 kDa

Blocking buffer: 5% NFDM/TBST
Dilution buffer: 5% NFDM/TBST

Western blot - Anti-Mitofusin 2 antibody [NIAR164] (ab124773)

This image is courtesy of an anonymous Abreview

Anti-Mitofusin 2 antibody [NIAR164] (ab124773) at 1/1000 dilution (unpurified) + Rat primary neurons cell lysate at 20 µg

Secondary

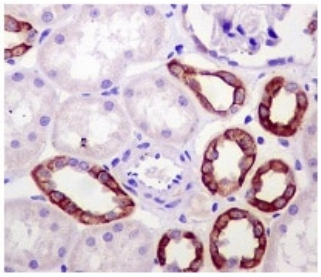
Anti-rabbit IgG HRP conjugate at 1/2000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 86 kDa

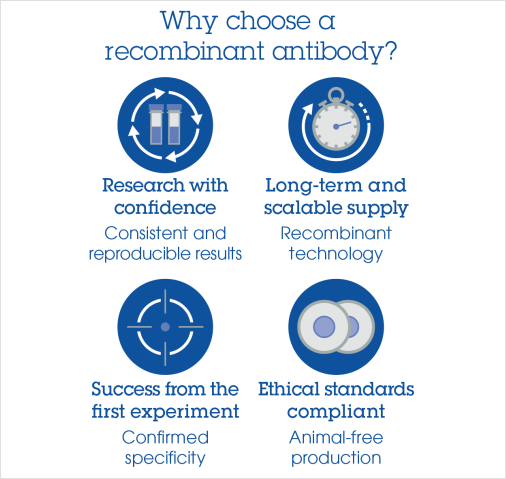
Exposure time: 30 seconds



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Mitofusin 2 antibody [NIAR164] (ab124773)

Unpurified ab124773, at 1/50, staining Mitofusin 2 in formalin fixed paraffin embedded Human kidney tissue using immunohistochemistry.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Anti-Mitofusin 2 antibody [NIAR164] (ab124773)

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