

Anti-Mitofusin 2 antibody [6A8] ab56889

★★★★★ [12 Abreviews](#) [300 References](#) [5 图像](#)

概述

产品名称	Anti-Mitofusin 2抗体[6A8]
描述	小鼠单克隆抗体[6A8] to Mitofusin 2
宿主	Mouse
经测试应用	适用于: WB, IHC-P, ICC/IF, Flow Cyt
种属反应性	与反应: Mouse, Human
免疫原	Recombinant fragment corresponding to Human Mitofusin 2 aa 661-757 (C terminal). Sequence: FKRQFVEHASEKLQLVISYTGSNCSHQVQQELSGTFAHLCQQ VDVTRENL EQEIAAMNKKIEVLDSLQSKAKLLRNKAGWLDSELNMFTHQY LQPSR

Database link: [O95140](#)

 [Run BLAST with](#)

 [Run BLAST with](#)

常规说明

This product was changed from ascites to tissue culture supernatant on 15 May 2019. Please note that the dilutions may need to be adjusted accordingly. If you have any questions, please do not hesitate to contact our scientific support team.

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

性能

形式	Liquid
存放说明	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
存储溶液	pH: 7.40 Constituent: PBS

纯度	Protein A purified
纯化说明	Purified by protein A from TCS.
克隆	单克隆
克隆编号	6A8
同种型	IgG2a
轻链类型	kappa

应用

The Abpromise guarantee **Abpromise™**承诺保证使用ab56889于以下的经测试应用

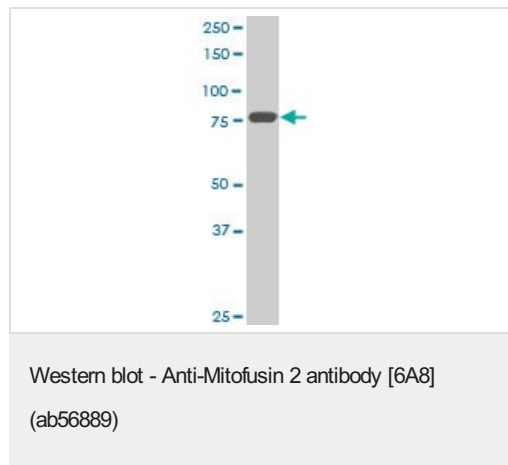
“应用说明”部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB	★★★★★ (7)	Use at an assay dependent concentration. Predicted molecular weight: 86 kDa.
IHC-P		Use at an assay dependent concentration.
ICC/IF	★★★★☆ (1)	Use at an assay dependent concentration.
Flow Cyt		Use at an assay dependent concentration. ab170191 - Mouse monoclonal IgG2a, is suitable for use as an isotype control with this antibody.

靶标

功能	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.
组织特异性	Ubiquitous; expressed at low level. Highly expressed in heart and kidney.
疾病相关	Charcot-Marie-Tooth disease 2A2 Neuropathy, hereditary motor and sensory, 6A
序列相似性	Belongs to the TRAFAC class dynamin-like GTPase superfamily. Dynamin/Fzo/YdjA family. Mitofusin subfamily. Contains 1 dynamin-type G (guanine nucleotide-binding) domain.
翻译后修饰	Phosphorylated by PINK1. Ubiquitinated by non-degradative ubiquitin by PARK2, promoting mitochondrial fusion; deubiquitination by USP30 inhibits mitochondrial fusion.

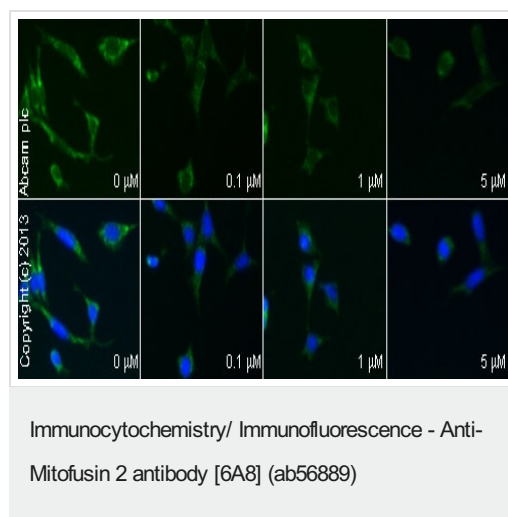
图片



Anti-Mitofusin 2 antibody [6A8] (ab56889) at 1 µg/ml + HeLa cell lysate at 25 µg

Predicted band size: 86 kDa

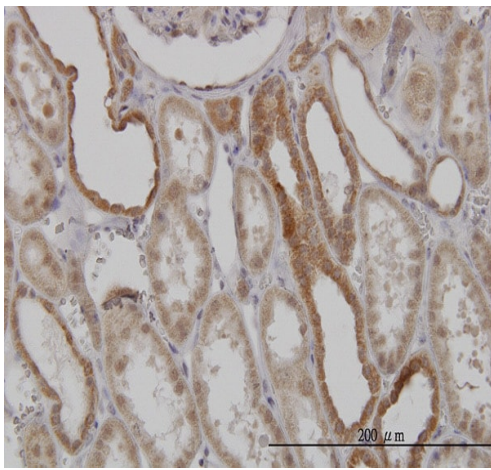
This image was generated using the ascites version of the product.



ab56889 staining mitofusin 2 in MEF1 cells treated with nigericin Na⁺ salt (**ab120494**), by ICC/IF. Decrease in mitofusin 2 expression correlates with increased concentration of nigericin Na⁺ salt, as described in literature.

The cells were incubated at 37°C for 3h in media containing different concentrations of **ab120494** (nigericin Na⁺ salt) in DMSO, fixed with 100% methanol for 5 minutes at -20°C and blocked with PBS containing 10% goat serum, 0.3 M glycine, 1% BSA and 0.1% tween for 2h at room temperature. Staining of the treated cells with ab56889 (10 µg/ml) was performed overnight at 4°C in PBS containing 1% BSA and 0.1% tween. A DyLight® 488 goat anti-mouse polyclonal antibody (**ab96879**) at 1/250 dilution was used as the secondary antibody. Nuclei were counterstained with DAPI and are shown in blue.

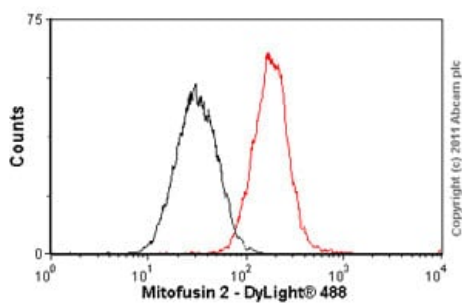
This image was generated using the ascites version of the product.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Mitofusin 2 antibody [6A8] (ab56889)

Mitofusin 2 antibody (ab56889) used in immunohistochemistry at 3ug/ml on formalin fixed and paraffin embedded human kidney.

This image was generated using the ascites version of the product.

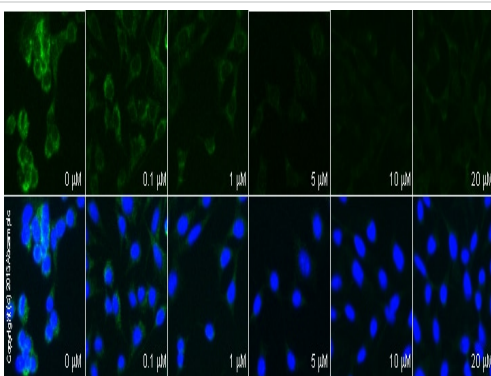


Flow Cytometry - Anti-Mitofusin 2 antibody [6A8] (ab56889)

Overlay histogram showing HEK293 cells stained with ab56889 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab56889, 1μg/1x10⁶ cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (**ab96879**) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG2a [ICIGG2A] (**ab91361**, 1μg/1x10⁶ cells) used under the same conditions.

Acquisition of >5,000 events was performed. This antibody gave a positive signal in HEK293 cells fixed with 4% paraformaldehyde (10 min)/permeabilized in 0.1% PBS-Tween used under the same conditions.

This image was generated using the ascites version of the product.



Immunocytochemistry/ Immunofluorescence - Anti-Mitofusin 2 antibody [6A8] (ab56889)

ab56889 staining mitofusin2 in MEF1 cells treated with valinomycin from Streptomyces fulvissimus (**ab120852**), by ICC/IF. Decrease in mitofusin2 expression with increased concentration of withaferin valinomycin from Streptomyces fulvissimus, as described in literature.

The cells were incubated at 37°C for 3h in media containing different concentrations of **ab120852** (valinomycin from Streptomyces fulvissimus) in DMSO, fixed with 100% methanol for 5 minutes at -20°C and blocked with PBS containing 10% goat serum, 0.3 M glycine, 1% BSA and 0.1% tween for 2h at room temperature. Staining of the treated cells with ab56889 (10 μg/ml) was performed overnight at 4°C in PBS containing 1% BSA and

0.1% tween. A DyLight® 488 goat anti-mouse polyclonal antibody (**ab96879**) at 1/250 dilution was used as the secondary antibody.

Nuclei were counterstained with DAPI and are shown in blue.

This image was generated using the ascites version of the product.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.cn/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors