# abcam

## Product datasheet

## Anti-OPA1 antibody [EPR11057(B)] - BSA and Azide free ab240143



重组 RabMAb

4 图像

#### 概述

免疫原

产品名称 Anti-OPA1抗体[EPR11057(B)] - BSA and Azide free

描述 兔单克隆抗体[EPR11057(B)] to OPA1 - BSA and Azide free

宿主 Rabbit

特异性 Recent lab testing showed that the antibody detects the band of interest at the proper molecular

> weight in several cell and tissue lysates. However, the antibody also detects a band at about 50kDa. We could not find in the literature any references on what this band could be. On our test,

the 50kDa band detections decreased by decreasing the antibody concentration.

经测试应用 适用于: WB, IHC-P, IHC-Fr

不适用于: ICC/IF or IP

种属反应性 与反应: Mouse. Human

预测可用于: Rat, Sheep, Rabbit, Horse, Chicken, Guinea pig, Pig, Non human primates,

Chinese hamster, Common marmoset, Bat

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

阳性对照 WB: HeLa, HepG2, A431 cell lysates; IHC-P: Human brain and retina tissue; IHC-Fr: Mouse retina

tissue.

常规说明 ab240143 is the carrier-free version of ab157457.

> 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<sup>®</sup> Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar<sup>®</sup> 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<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**<sup>®</sup> **patents**.

性能

形式 Liquid

**存放说明** Shipped at 4°C. Store at +4°C. Do Not Freeze.

**存储溶液** pH: 7.2

Constituent: PBS

**无载体** 是

纯**度** Protein A purified

**克隆** 单克隆

**克隆编号** EPR11057(B)

**同种型** IgG

应用

### The Abpromise guarantee

Abpromise™承诺保证使用ab240143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 <b>用</b>	Ab评论	说明
WB		Use at an assay dependent concentration. Predicted molecular weight: 112 kDa.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.
IHC-Fr		Use at an assay dependent concentration.  Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20)

应用说明

Is unsuitable for ICC/IF or IP.

#### 靶标

功能

Dynamin-related GTPase required for mitochondrial fusion and regulation of apoptosis. May form a diffusion barrier for proteins stored in mitochondrial cristae. Proteolytic processing in response to intrinsic apoptotic signals may lead to disassembly of OPA1 oligomers and release of the caspase activator cytochrome C (CYCS) into the mitochondrial intermembrane space.

组织特异性

Highly expressed in retina. Also expressed in brain, testis, heart and skeletal muscle. Isoform 1 expressed in retina, skeletal muscle, heart, lung, ovary, colon, thyroid gland, leukocytes and fetal brain. Isoform 2 expressed in colon, liver, kidney, thyroid gland and leukocytes. Low levels of all isoforms expressed in a variety of tissues.

疾病相关

Defects in OPA1 are a cause of optic atrophy type 1 (OPA1) [MIM:165500]. OPA1 is a dominantly inherited optic neuropathy occurring in 1 in 50,000 individuals that features progressive loss in visual acuity leading, in many cases, to legal blindness.

Defects in OPA1 are the cause of optic atrophy 1 with deafness (OPA1D) [MIM:125250]. Some

individuals with mutations in OPA1 manifest also ophthalmoplegia and myopathy.

序列相似性

Belongs to the dynamin family.

翻译后修饰

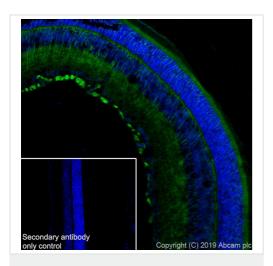
PARL-dependent proteolytic processing releases an antiapoptotic soluble form not required for

mitochondrial fusion.

细胞定位

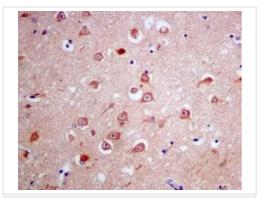
Mitochondrion inner membrane. Mitochondrion intermembrane space.

#### 图片



Immunohistochemistry (Frozen sections) - Anti-OPA1 antibody [EPR11057(B)] - BSA and Azide free (ab240143) Immunohistochemistry (Frozen sections) analysis of mouse retina tissue sections labeling OPA1 with Purified **ab157457** at 1/250 (1.1 µg/ml). Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20). Goat anti rabbit lgG (Alexa Fluor® 488, **ab150077**) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. DAPI 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 (<u>ab157457</u>).



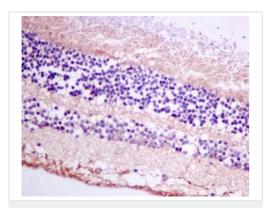
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-OPA1 antibody

[EPR11057(B)] - BSA and Azide free (ab240143)

Immunohistochemical analysis of Paraffin-embedded Human brain tissue labeling OPA1 with <u>ab157457</u> at 1/250 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab157457</u>).

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



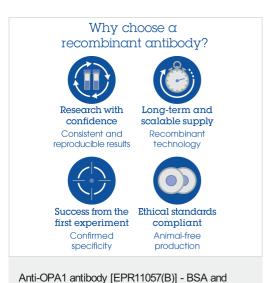
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Azide free (ab240143)

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

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