# abcam

## Product datasheet

## Anti-Frataxin antibody [EPR6107] ab124680



重组 RabMAb

1 References 5 图像

概述

产品名称 Anti-Frataxin抗体[EPR6107]

描述 兔单克隆抗体[EPR6107] to Frataxin

宿主 Rabbit

特异性 We suggest optimizing experimental protocols (increasing lysate amount, using lower dilution or

higher sensitivity ECL substrate) to improve results.

适用于: WB 经测试应用

**不适用于: IHC-P** 

种属反应性 与反应: Human

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

阳性对照 WB: Human fetal heart tissue, human skin, His tagged Human FXN recombinant protein (aa 82-

210), Human liver and hippocampus tissues, HCT116, Huh7 and SH-SY5Y whole cell lysates.

常规说明 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**.

Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with

these species. Please contact us for more information.

性能

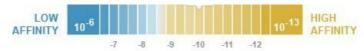
形式 Liquid

存放说明 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C.

Stable for 12 months at -20°C.

 $K_D = 3.19 \times 10^{-10} M$ 解离常数(K<sub>□</sub>)

10-10



#### Learn more about KD

**存储溶液** pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 40% Glycerol (glycerin, glycerine), 0.05% BSA, 59% PBS

纯**度** Protein A purified

**同种型** IgG

#### 应用

## The Abpromise guarantee Abpromise™承诺保证使用ab124680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		1/1000 - 1/10000. Detects a band of approximately 17, 30 kDa (predicted molecular weight: 19, 23 kDa).

应用说明 Is unsuitable for IHC-P.

#### 靶标

功能

Promotes the biosynthesis of heme and assembly and repair of iron-sulfur clusters by delivering Fe(2+) to proteins involved in these pathways. May play a role in the protection against iron-catalyzed oxidative stress through its ability to catalyze the oxidation of Fe(2+) to Fe(3+); the oligomeric form but not the monomeric form has in vitro ferroxidase activity. May be able to store large amounts of iron in the form of a ferrihydrite mineral by oligomerization; however, the physiological relevance is unsure as reports are conflicting and the function has only been shown using heterologous overexpression systems. Modulates the RNA-binding activity of ACO1.

组织特异性

Expressed in the heart, peripheral blood lymphocytes and dermal fibroblasts.

疾病相关

Defects in FXN are the cause of Friedreich ataxia (FRDA) [MIM:229300]. FRDA is an autosomal recessive, progressive degenerative disease characterized by neurodegeneration and cardiomyopathy it is the most common inherited ataxia. The disorder is usually manifest before adolescence and is generally characterized by incoordination of limb movements, dysarthria, nystagmus, diminished or absent tendon reflexes, Babinski sign, impairment of position and vibratory senses, scoliosis, pes cavus, and hammer toe. In most patients, FRDA is due to GAA triplet repeat expansions in the first intron of the frataxin gene. But in some cases the disease is due to mutations in the coding region.

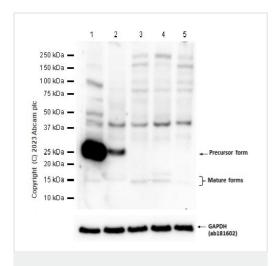
序列相似性

Belongs to the frataxin family.

翻译后修饰

Processed in two steps by mitochondrial processing peptidase (MPP). MPP first cleaves the precursor to intermediate form and subsequently converts the intermediate to yield frataxin mature form (frataxin(81-210)) which is the predominant form. The additional forms, frataxin(56-210) and frataxin(78-210), seem to be produced when the normal maturation process is impaired; their

#### 图片



Western blot - Anti-Frataxin antibody [EPR6107] (ab124680)

**All lanes :** Anti-Frataxin antibody [EPR6107] (ab124680) at 1/1000 dilution

Lane 1: Human liver tissue lysate

Lane 2: Human hippocampus tissue

Lane 3: HCT116 (human colorectal carcinoma epithelial cell)

whole cell lysate

Lane 4: Huh7 (human hepatocellular carcinoma epithelial cell)

whole cell lysate

Lane 5: SH-SY5Y (human neuroblastoma epithelial cell) whole cell

lysate

Lysates/proteins at 20 µg per lane.

### **Secondary**

All lanes: Goat Anti-Rabbit lgG H&L (HRP) (ab97051) at 1/20000

dilution

**Predicted band size:** 19, 23 kDa **Observed band size:** 14,17 kDa

Exposure time: 60 seconds

Blocking buffer and concentration: 5% NFDM/TBST.

Diluting buffer and concentration: 5% NFDM/TBST.

This blot was developed using a high sensitivity ECL substrate.

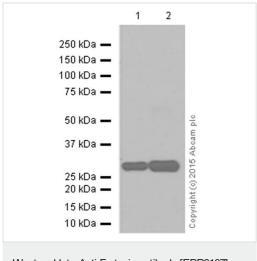
For different forms of frataxin, you can refer to PMID: 17468497,

PMID: 31279523, PMID: 17468497 etc.

<u>ab181602</u> was used as a loading control.



Western blot - Anti-Frataxin antibody [EPR6107] (ab124680)



Western blot - Anti-Frataxin antibody [EPR6107] (ab124680)

Anti-Frataxin antibody [EPR6107] (ab124680) at 1/1000 dilution + His tagged Human FXN recombinant protein (aa 82-210), 10ng

#### **Secondary**

Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

**Predicted band size:** 19, 23 kDa **Observed band size:** 16 kDa

Exposure time: 60 seconds

Blocking and diluting buffer and concentration: 5% NFDM/TBST. **ab213204** was used as a loading control.

**All lanes :** Anti-Frataxin antibody [EPR6107] (ab124680) at 1/5000 dilution (purified)

Lane 1: Human fetal heart tissue lysate

Lane 2: Human skin lysate

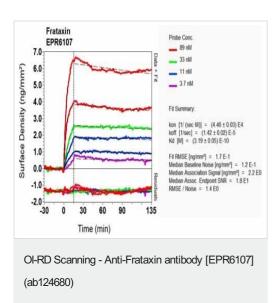
Lysates/proteins at 20 µg per lane.

#### Secondary

**All lanes :** Anti-Rabbit lgG (HRP), specific to the non-reduced form of lgG at 1/2000 dilution

**Predicted band size:** 19, 23 kDa **Observed band size:** 30 kDa

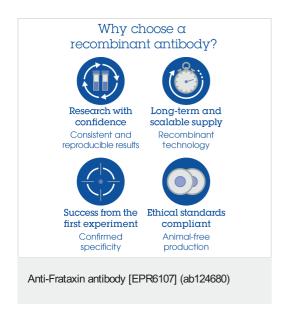
Blocking and diluting buffer 5% NFDM/TBST



Equilibrium disassociation constant (K<sub>D</sub>)

Learn more about K<sub>D</sub>

Click here to learn more about K<sub>D</sub>



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 <a href="https://www.abcam.cn/abpromise">https://www.abcam.cn/abpromise</a> or contact our technical team.

## Terms and conditions

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