

Anti-Frataxin antibody [17A11] ab113691

★★★★★ 3 Abreviews 16 References 画像数 4

製品の概要

製品名	Anti-Frataxin antibody [17A11]
製品の詳細	Mouse monoclonal [17A11] to Frataxin
由来種	Mouse
アプリケーション	適用あり: WB, ICC/IF, Flow Cyt, IHC-P
種交差性	交差種: Mouse, Rat, Cow, Human, Recombinant fragment
免疫原	Recombinant fragment within Human Frataxin aa 1-120. The exact sequence is proprietary. Database link: Q16595
ポジティブ・コントロール	WB: heart, liver tissue lysate. IHC-P: heart muscle, liver, kidney tissue (FFPE).
特記事項	<p>This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact orders@abcam.com.</p> <p>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.</p> <p>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</p> <p>Product was previously marketed under the MitoSciences sub-brand.</p>

製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Store at +4°C.
バッファー	pH: 7.5 Preservative: 0.02% Sodium azide Constituent: HEPES buffered saline
特記事項 (精製)	The antibody was produced in vitro using hybridomas grown in serum-free medium, and then purified by affinity purification.
ポリ/モノ	モノクローナル
クローン名	17A11

アイソタイプ	IgG1
軽鎖の種類	kappa

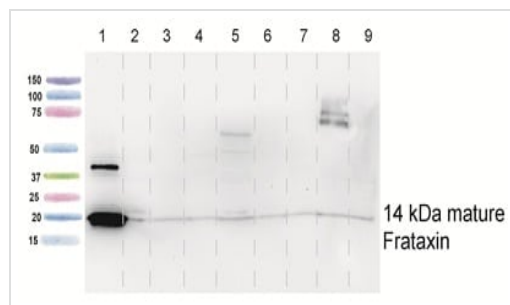
アプリケーション

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ab113691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確認ください。

アプリケーション	Abreviews	特記事項
WB	★★★★☆ (2)	Use a concentration of 4 µg/ml. Detects a band of approximately 14 kDa (predicted molecular weight: 14 kDa).
ICC/IF	★★★★★ (1)	Use a concentration of 1 µg/ml.
Flow Cyt		Use a concentration of 1 µg/ml. ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.
IHC-P		Use a concentration of 10 µg/ml.

ターゲット情報

機能	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.
組織特異性	Expressed in the heart, peripheral blood lymphocytes and dermal fibroblasts.
関連疾患	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.
配列類似性	Belongs to the frataxin family.
翻訳後修飾	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 physiological relevance is unsure.
細胞内局在	Cytoplasm. Mitochondrion. PubMed:18725397 reports localization exclusively in mitochondria.



Western blot - Anti-Frataxin antibody [17A11]
(ab113691)

All lanes : Anti-Frataxin antibody [17A11] (ab113691)

Lane 1 : Recombinant frataxin

at 0.1 μ g

Lane 2 : Human heart mitochondria

at 15 μ g

Lane 3 : Human liver mitochondria

at 15 μ g

Lane 4 : HepG2 whole cell lysate

at 15 μ g

Lane 5 : Bovine heart mitochondria

at 15 μ g

Lane 6 : H9C2 rat whole cell lysate

at 15 μ g

Lane 7 : MEF mouse embryonic fibroblast

at 15 μ g

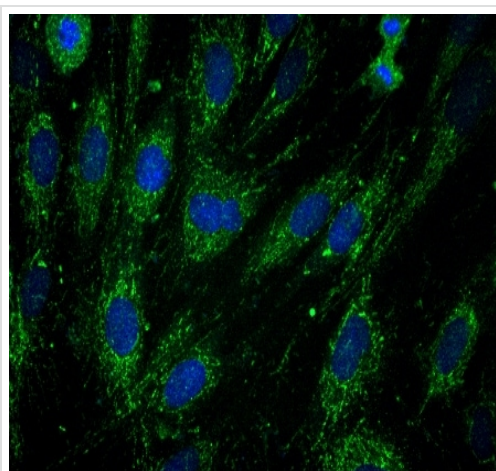
Lane 8 : Mouse liver mitochondria

at 15 μ g

Lane 9 : Rat liver mitochondria

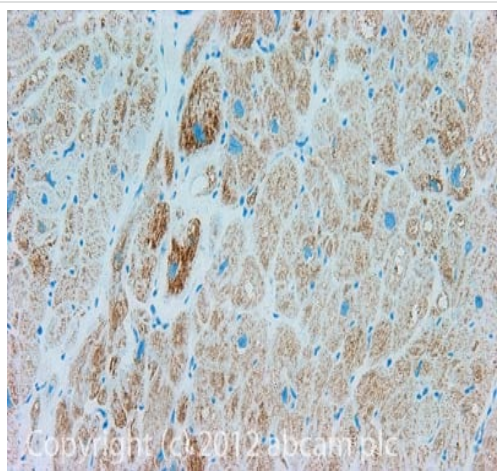
at 15 μ g

Predicted band size: 14 kDa



Immunocytochemistry/ Immunofluorescence - Anti-Frataxin antibody [17A11] (ab113691)

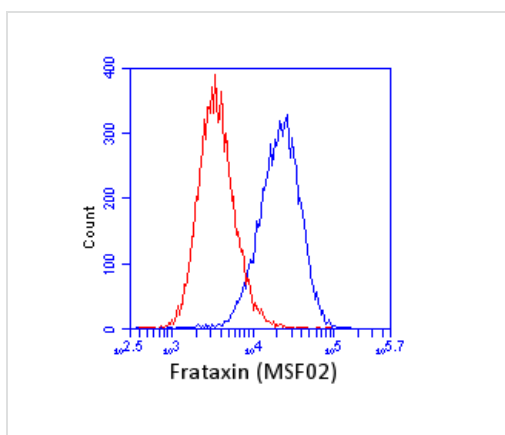
ab113691 stained fibroblast cells. The cells were paraformaldehyde fixed (4%, 20 min) and Triton X-100 permeabilized (0.1%, 15min). The cells were incubated with the antibody (ab113691, 1 μ g/ml) for 2h at room temperature or overnight at 4°C. The secondary antibody was (green) Alexa Fluor® 488 goat anti-mouse IgG (H+L) used at a 1/1000 dilution for 1h. 10% Goat serum was used as the blocking agent for all blocking steps. The target protein locates to the mitochondrial matrix.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Frataxin antibody [17A11] (ab113691)

IHC image of Frataxin staining in Human normal heart muscle formalin fixed paraffin embedded tissue section, performed on a Leica Bond™ system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab113691, 10µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.



Flow Cytometry - Anti-Frataxin antibody [17A11] (ab113691)

Normal human lymphoblast cells were stained with 1 µg/mL ab113691 (blue) or an equal amount of an isotype control antibody (red) and analyzed by flow cytometry.

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.co.jp/abpromise> or contact our technical team.

Terms and conditions

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