

**Frataxin Polyclonal Antibody**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP59300****Specification****Frataxin Polyclonal Antibody - Product Information**

Application	WB, IHC-P, IHC-F, IF, ICC, E
Primary Accession	<a href="#">Q16595</a>
Reactivity	Rat, Pig, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	23135

**Frataxin Polyclonal Antibody - Additional Information****Gene ID** 2395**Other Names**

Frataxin, mitochondrial, 1.16.3.1, Friedreich ataxia protein, Fxn, Frataxin intermediate form, i-FXN, Frataxin(56-210), m56-FXN, Frataxin(78-210), d-FXN, m78-FXN, Frataxin mature form, Frataxin(81-210), m81-FXN, FXN, FRDA, X25

**Dilution**

<span class = "dilution\_WB">WB~~1:1000</span><br \><span class = "dilution\_IHC-P">IHC-P~~N/A</span><br \><span class = "dilution\_IHC-F">IHC-F~~N/A</span><br \><span class = "dilution\_IF">IF~~1:50~200</span><br \><span class = "dilution\_ICC">ICC~~N/A</span><br \><span class = "dilution\_E">E~~N/A</span>

**Format**

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

**Storage**

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

**Frataxin Polyclonal Antibody - Protein Information****Name** FXN ([HGNC:3951](#))**Synonyms** FRDA, X25**Function**

[Frataxin mature form]: Functions as an activator of persulfide transfer to the scaffolding protein ISCU as component of the core iron-sulfur cluster (ISC) assembly complex and participates to the [2Fe-2S] cluster assembly (PubMed: <http://www.uniprot.org/citations/12785837> target="\_blank">12785837</a>, PubMed: <http://www.uniprot.org/citations/24971490> target="\_blank">24971490</a>). Accelerates sulfur transfer from NFS1 persulfide intermediate to

ISCU and to small thiols such as L-cysteine and glutathione leading to persulfuration of these thiols and ultimately sulfide release (PubMed:<a href="http://www.uniprot.org/citations/24971490" target="\_blank">24971490</a>). Binds ferrous ion and is released from FXN upon the addition of both L-cysteine and reduced FDX2 during [2Fe-2S] cluster assembly (PubMed:<a href="http://www.uniprot.org/citations/29576242" target="\_blank">29576242</a>). The core iron-sulfur cluster (ISC) assembly complex is involved in the de novo synthesis of a [2Fe-2S] cluster, the first step of the mitochondrial iron-sulfur protein biogenesis. This process is initiated by the cysteine desulfurase complex (NFS1:LYRM4:NDUFAB1) that produces persulfide which is delivered on the scaffold protein ISCU in a FXN-dependent manner. Then this complex is stabilized by FDX2 which provides reducing equivalents to accomplish the [2Fe-2S] cluster assembly. Finally, the [2Fe-2S] cluster is transferred from ISCU to chaperone proteins, including HSCB, HSPA9 and GLRX5 (By similarity). 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 (PubMed:<a href="http://www.uniprot.org/citations/15641778" target="\_blank">15641778</a>). 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 (PubMed:<a href="http://www.uniprot.org/citations/11823441" target="\_blank">11823441</a>, PubMed:<a href="http://www.uniprot.org/citations/12755598" target="\_blank">12755598</a>). May function as an iron chaperone protein that protects the aconitase [4Fe-4S]<sub>2</sub> cluster from disassembly and promotes enzyme reactivation (PubMed:<a href="http://www.uniprot.org/citations/15247478" target="\_blank">15247478</a>). May play a role as a high affinity iron binding partner for FECH that is capable of both delivering iron to ferrochelatase and mediating the terminal step in mitochondrial heme biosynthesis (PubMed:<a href="http://www.uniprot.org/citations/15123683" target="\_blank">15123683</a>, PubMed:<a href="http://www.uniprot.org/citations/16239244" target="\_blank">16239244</a>).

#### **Cellular Location**

[Frataxin mature form]: Mitochondrion

#### **Tissue Location**

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

### **Frataxin Polyclonal Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### **Frataxin Polyclonal Antibody - Images**