

Rabbit FXN Polyclonal Antibody | anti-FXN antibody

FXN Antibody

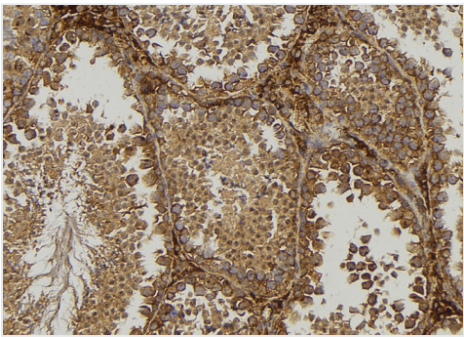
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA326355	Rabbit	Human, Mouse, Rat	ELISA, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

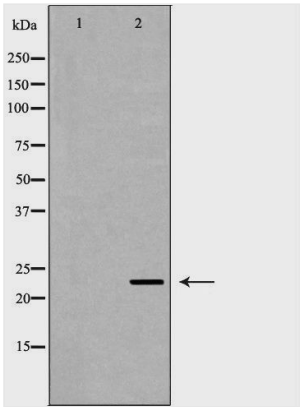
FXN; Polyclonal Antibody; FXN Antibody; CyaY; d-FXN; FA; FARR; Frataxin mature form; Frataxin(81-210); FRDA; FRDA_HUMAN; Friedreich ataxia protein; Fxn; i-FXN; m56-FXN; m78-FXN; m81-FXN; MGC57199; X25; anti-FXN antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	FXN antibody detects endogenous levels of total FXN
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	210
Applicable Applications for anti-FXN antibody	ELISA, IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human FXN
Subcellular Location	Cytoplasm. Mitochondrion. PubMed:18725397 reports localization exclusively in mitochondria.
Tissue Specificity	Expressed in the heart, peripheral blood lymphocytes and dermal fibroblasts.
Predicted Cross Reactivity	Zebrafish, Bovine, Horse, Sheep, Rabbit, Dog, Chicken
Similarity	Zebrafish (91%), Bovine (92%), Horse (100%), Sheep (92%), Rabbit (100%), Dog (100%), Chicken (92%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.



IHC (Immunohistochemistry)
AAA326355 at 1/100 staining Mouse testis tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



WB (Western Blot)
Western blot analysis of A549 whole cell lysates, using FXN Antibody. The lane on the left is treated with the antigen-specific peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-FXN antibody

Description: FXN, also named as FRDA, X25, m81-FXN, d-FXN, m78-FXN and i-FXN, belongs to the frataxin family. It promotes the biosynthesis of heme and assembly and repair of iron-sulfur clusters by delivering Fe2+ to proteins involved in these pathways. FXN may play a role in the protection against iron-catalyzed oxidative stress through its ability to catalyze the oxidation of Fe2+ to Fe3+; the oligomeric form but not the monomeric form has in vitro ferroxidase activity. FXN is cleaved to be 4 chains. The mature form of FXN is 14kd or 18kd.

Function: Promotes the biosynthesis of heme and assembly and repair of iron-sulfur clusters by delivering Fe2+ 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 Fe2+ to Fe3+; 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.

Subunit Structure: Monomer (probable predominant form). Oligomer. Monomers and polymeric aggregates of > 1 MDa have been isolated from mitochondria. A small fraction of heterologous overexpressed recombinant frataxin forms high-molecular wight aggregates that incorporate iron (PubMed:11823441, PubMed:12755598, PubMed:15641778, PubMed:15581888). Interacts with LYRM4 (PubMed:17331979). Interacts with ACO1 (PubMed:20053667). Interacts with ISCU isoform 1 and isoform 2 (PubMed:12785837, PubMed:16091420). Interacts with FECH; one iron-bound FXN monomer seems to interact with a FECH homodimer (PubMed:15123683). Interacts with SDHA and SDHB (PubMed:15961414). Interacts with ACO2; the interaction is dependent on citrate (By similarity). Interacts with HSPA9 (PubMed:17331979, PubMed:26702583).

Post-translational Modifications: 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.

Similarity: Belongs to the frataxin family.

NCBI AND UNIPROT INFORMATION

NCBI GI #	31077081
NCBI GeneID	2395
NCBI Accession #	NP_000135.2
NCBI GenBank Nucleotide #	NM_000144.4
UniProt Accession #	Q16595; O15545; O95656; Q15294; Q5VZ01; A8MXJ6; C9JJ89
Molecular Weight	Observed: 23 kDa Predicted: 24 kDa
NCBI Official Full Name	frataxin, mitochondrial isoform 1 preproprotein

NCBI Official Synonym Full Names	frataxin
NCBI Official Symbol	FXN
NCBI Official Synonym Symbols	FA; X25; CyaY; FARR; FRDA
NCBI Protein Information	frataxin, mitochondrial
UniProt Protein Name	Frataxin, mitochondrial
UniProt Gene Name	FXN
UniProt Synonym Gene Names	FRDA; X25; Fxn; i-FXN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/fxn-antibody-immunohistochemistry-western-blot-elisa/326355>