For Research Use Only

Recombinant Human Frataxin protein (rFc Tag)



Catalog Number: Eg4622

Basic Information

Species: Human

Purity: >90 %, SDS-PAGE

Tag: rFc Tag

Technical Specifications

Purity: >90 %, SDS-PAGE

Endotoxin Level:

<0.1 EU/ µ g protein, LAL method

HEK293-derived Human Frataxin protein Leu42-Ala210 (Accession# Q16595-1) with a rabbit IgG Fc tag at the Nterminus.

GeneID:

2395

Accession: Q16595-1

Predicted Molecular Mass:

46.0 kDa

SDS-PAGE:

48-55 kDa, reducing (R) conditions

Formulation:
Lyophilized from 0.22 µm filtered solution in PBS, pH 7.4. Normally 5% trehalose and 5% mannitol are added as protectants before lyophilization.

Biological Activity

Not tested

Storage and Shipping

Storage:

It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

- Until expiry date, -20% to -80% as lyophilized proteins. 3 months, -20% to -80% under sterile conditions after reconstitution.

Shipping:
The product is shipped at ambient temperature. Upon receipt, store it immediately at the recommended temperature.

Reconstitution

Briefly centrifuge the tube before opening. Reconstitute at 0.1-0.5 mg/mL in sterile water.

Background

Frataxin (FXN), also named as FRDA, X25, m81-FXN, d-FXN, m78-FXN and i-FXN, belongs to the frataxin family. Frataxin is a mitochondrial iron-binding protein involved in iron storage, detoxification, and delivery for iron sulfur-cluster assembly and heme biosynthesis. It promotes the biosynthesis of heme and assembly and repair of iron-sulfur clusters by delivering Fe2+ to proteins involved in these pathways. Frataxin 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.

References

- 1. O'Neill HA. et al. (2005). J Mol Biol. 345(3):433-9. 2. Gakh O, et al. (2008). J Biol Chem. 283(46):31500-10. 3. Das D, et al. (2019). J Biol Chem. 294(23):9276-9284.

Synonyms

FXN, CyaY, d FXN, dFXN, EC:1.16.3.1

Selected Validation Data



Purity of Recombinant Human Frataxin was determined by SDS-PAGE. The protein was resolved in an SDS-PAGE in reducing (R) and non-reducing (NR) conditions and stained using Coomassie blue.