

Ferredoxin Reductase Antibody (Clone 6C2)

Mouse Monoclonal Antibody Catalog # ABV11178

Specification

Ferredoxin Reductase Antibody (Clone 6C2) - Product Information

Application WB
Primary Accession P22570
Reactivity Human
Host Mouse
Clonality Monoclonal
Isotype Mouse IgG1
Calculated MW 53837

Ferredoxin Reductase Antibody (Clone 6C2) - Additional Information

Gene ID 2232

Positive Control WB: Jurkat, HeLa and 293 T cell lysate

Application & Usage W

Other Names

NADPH: adrenodoxin oxidoreductase, mitochondrial, FDXR, ADXR

Target/Specificity
Ferredoxin Reductase

Antibody Form

Liquid

Appearance Colorless liquid

Formulation

 $100~\mu l$ of antibody in HEPES with 0.15 M NaCl, 0.01 % BSA, 0.03 % sodium azide, and 50 % glycerol

Handling

The antibody solution should be gently mixed before use.

Reconstitution & Storage

-20 °C

Background Descriptions

Precautions

Ferredoxin Reductase Antibody (Clone 6C2) is for research use only and not for use in diagnostic or therapeutic procedures.



Ferredoxin Reductase Antibody (Clone 6C2) - Protein Information

Name FDXR (HGNC:3642)

Synonyms ADXR

Function

Serves as the first electron transfer protein in all the mitochondrial P450 systems including cholesterol side chain cleavage in all steroidogenic tissues, steroid 11-beta hydroxylation in the adrenal cortex, 25-OH-vitamin D3-24 hydroxylation in the kidney, and sterol C- 27 hydroxylation in the liver.

Cellular Location

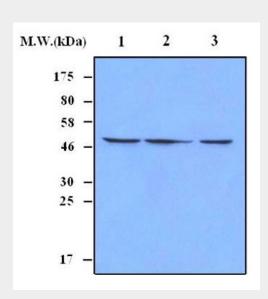
Mitochondrion inner membrane {ECO:0000250|UniProtKB:P48360}; Peripheral membrane protein

Ferredoxin Reductase Antibody (Clone 6C2) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Ferredoxin Reductase Antibody (Clone 6C2) - Images



WB analysis. Lane 1: HeLa cell lysate, Lane 2: Jurkat cell lysate, Lane 3: 293 T cell lysate

Ferredoxin Reductase Antibody (Clone 6C2) - Background

Ferredoxin reductase is a ubiquitous flavoenzyme, containing noncovalently bound FAD as a prosthetic group. It plays a role in delivering NADPH or low potential one-electron donors such as ferredoxin and flavodoxin to redox-based metabolisms in plastids, mitochondria and bacteria. In





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mammals, ferredoxin reductase is loosely associated with the inner mitochondrial membrane and receives electrons from NADPH. These electrons are transferred to ferredoxin which shuttles electrons to cytochrome P450 in the adrenal cortex mitochondrial steroid hydroxylation systems. It serves as the first electron transfer protein in all the mitochondrial P450 systems. Including cholesterol side chain cleavage in all steroidogenic tissues, steroid 11-beta hydroxylation in the adrenal cortex, 25-OH-vitamin D3-24 hydroxylation in the kidney, and sterol C-27 hydroxylation in the liver.