

Adrenodoxin Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP54496

Product Information

Application WB, IHC-P, IHC-F, IF, ICC, E

Primary Accession P10109
Reactivity Rat

Predicted Human, Mouse, Sheep

Host Rabbit
Clonality Polyclonal
Calculated MW 19393
Physical State Liquid

Immunogen KLH conjugated synthetic peptide derived from human Adrenodoxin/FDX

Epitope Specificity 51-150/184

Isotype IgG

Purity affinity purified by Protein A

Buffer 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

SUBCELLULAR LOCATION Mitochondrion matrix.

SIMILARITY Belongs to the adrenodoxin/putidaredoxin family. Contains 1 2Fe-2S

ferredoxin-type domain.

Important Note This product as supplied is intended for research use only, not for use in

human, therapeutic or diagnostic applications.

Background Descriptions This gene encodes a small iron-sulfur protein that transfers electrons from

NADPH through ferredoxin reductase to mitochondrial cytochrome P450, involved in steroid, vitamin D, and bile acid metabolism. Pseudogenes of this functional gene are found on chromosomes 20 and 21. [provided by RefSeq,

Aug 2011]

Additional Information

Gene ID 2230

Other Names Adrenodoxin, mitochondrial, Adrenal ferredoxin, Ferredoxin-1,

Hepatoredoxin, FDX1, ADX

Target/Specificity Highest levels in the adrenal gland (at protein level). Also detected in kidney

and testis (at protein level).

Dilution WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-50

0,ELISA=1:5000-10000

Format 0.01M TBS(pH7.4) with 1% BSA, 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

Protein Information

Name FDX1

Synonyms ADX

Function Essential for the synthesis of various steroid hormones (PubMed: 20547883,

PubMed:<u>21636783</u>). Participates in the reduction of mitochondrial

cytochrome P450 for steroidogenesis (PubMed: 20547883,

PubMed:<u>21636783</u>). Transfers electrons from adrenodoxin reductase to CYP11A1, a cytochrome P450 that catalyzes cholesterol side-chain cleavage (PubMed:<u>20547883</u>, PubMed:<u>21636783</u>). Does not form a ternary complex with adrenodoxin reductase and CYP11A1 but shuttles between the two

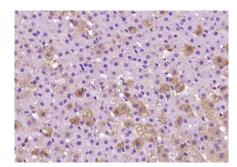
enzymes to transfer electrons (By similarity).

Cellular Location Mitochondrion matrix

Tissue Location Highest levels in the adrenal gland (at protein level). Also detected in kidney

and testis (at protein level)

Images



Paraformaldehyde-fixed, paraffin embedded (rat adrenal gland tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Adrenodoxin) Polyclonal Antibody, Unconjugated (AP54496) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.