

## NADPH:adrenodoxin oxidoreductase Recombinant Protein | FDXR recombinant protein

Recombinant Human NADPH:adrenodoxin oxidoreductase, mitochondrial

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| CATALOG #<br><b>AAA113470</b> | HOST<br><b>E Coli or Yeast or Baculovirus or Mammalian Cell</b> |
|-------------------------------|-----------------------------------------------------------------|

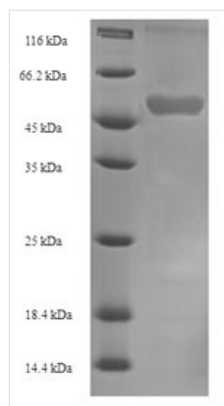
### PRODUCT SYNONYMS

NADPH:adrenodoxin oxidoreductase; Recombinant Human NADPH:adrenodoxin oxidoreductase; mitochondrial; Ferredoxin-NADP(+) reductase; Ferredoxin reductase; FDXR recombinant protein

### PRODUCT SPECIFICATIONS

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
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| Host                    | E Coli or Yeast or Baculovirus or Mammalian Cell                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Purity/Purification     | Greater or equal to 85% purity as determined by SDS-PAGE.                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Form/Format             | Lyophilized or liquid (Format to be determined during the manufacturing process)                                                                                                                                                                                                                                                                                                                                                                                                           |
| Sequence Positions      | 33-451. Full Length of Mature Protein( Isoform 6)                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Sequence                | STQEKTPQIC VVGSGPAGFY TAQHLLKQHP QAHVDIYEKQ PVPFGLVRFG VAPDHPEVKS YGAEDHRALE<br>IPGEELPGVC SARAFVGWYN GLPENQELEP DLSCDTAVIL GQGNVALDVA RILLTPPEHL ERTDITKAAL<br>GVLQRQSRVKT VWLVGRRGPL QVAFTIKELR EMIQLPGARP ILDPVDLGL QDKIKEVPRP RKRLTELLR<br>TATEKPGPAE AARQASASRA WGLRFFRSPQ QVLPSPDGRR AAGVRLAVTR LEGVDEATRA VPTGDMEDLP<br>CGLVLSSIGY KSRPVDPSVP FDSKLGVIPN VEGRVMDVPG LYCSGWVKRG PTGVIATTMT DSFLTQQMLL<br>QDLKAGLLPS GPRPGYAAIQ ALLSSRGVRP VSFSDWEKLD AEEVARGQGT GKPREKLVDP QEMLRLLGH |
| Preparation and Storage | Store at -20 degree C, for extended storage, conserve at -20 degree C or -80 degree C.                                                                                                                                                                                                                                                                                                                                                                                                     |

### IMAGES



SDS-PAGE

### ADDITIONAL INFORMATION

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| Related Product Information for FDXR recombinant protein | 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. |
| Product Categories/Family for FDXR recombinant protein   | <a href="#">Cell Biology</a>                                                                                                                                                                                                                                                                                   |

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| References | <p>Human adrenodoxin reductase two mRNAs encoded by a single gene on chromosome 17cen--&gt;q25 are expressed in steroidogenic tissues.Solish S.B., Picado-Leonard J., Morel Y., Kuhn R.W., Mohandas T.K., Hanukoglu I., Miller W.L.Proc. Natl. Acad. Sci. U.S.A. 85:7104-7108(1988) Cloning and sequence of the human adrenodoxin reductase gene.Lin D., Shi Y., Miller W.L.Proc. Natl. Acad. Sci. U.S.A. 87:8516-8520(1990) NIEHS SNPs programComplete sequencing and characterization of 21,243 full-length human cDNAs.Ota T., Suzuki Y., Nishikawa T., Otsuki T., Sugiyama T., Irie R., Wakamatsu A., Hayashi K., Sato H., Nagai K., Kimura K., Makita H., Sekine M., Obayashi M., Nishi T., Shibahara T., Tanaka T., Ishii S., Yamamoto J., Saito K., Kawai Y., Isono Y., Nakamura Y., Nagahari K., Murakami K., Yasuda T., Iwayanagi T., Wagatsuma M., Shiratori A., Sudo H., Hosoiri T., Kaku Y., Kodaira H., Kondo H., Sugawara M., Takahashi M., Kanda K., Yokoi T., Furuya T., Kikkawa E., Omura Y., Abe K., Kamihara K., Katsuta N., Sato K., Tanikawa M., Yamazaki M., Ninomiya K., Ishibashi T., Yamashita H., Murakawa K., Fujimori K., Tanai H., Kimata M., Watanabe M., Hiraoka S., Chiba Y., Ishida S., Ono Y., Takiguchi S., Watanabe S., Yosida M., Hotuta T., Kusano J., Kanehori K., Takahashi-Fujii A., Hara H., Tanase T.-O., Nomura Y., Togiya S., Komai F., Hara R., Takeuchi K., Arita M., Imose N., Musashino K., Yuuki H., Oshima A., Sasaki N., Aotsuka S., Yoshikawa Y., Matsunawa H., Ichihara T., Shiohata N., Sano S., Moriya S., Momiyama H., Satoh N., Takami S., Terashima Y., Suzuki O., Nakagawa S., Senoh A., Mizoguchi H., Goto Y., Shimizu F., Wakebe H., Hishigaki H., Watanabe T., Sugiyama A., Takemoto M., Kawakami B., Yamazaki M., Watanabe K., Kumagai A., Itakura S., Fukuzumi Y., Fujimori Y., Komiyama M., Tashiro H., Tanigami A., Fujiwara T., Ono T., Yamada K., Fujii Y., Ozaki K., Hirao M., Ohmori Y., Kawabata A., Hikiji T., Kobatake N., Inagaki H., Ikema Y., Okamoto S., Okitani R., Kawakami T., Noguchi S., Itoh T., Shigeta K., Senba T., Matsumura K., Nakajima Y., Mizuno T., Morinaga M., Sasaki M., Togashi T., Oyama M., Hata H., Watanabe M., Komatsu T., Mizushima-Sugano J., Satoh T., Shirai Y., Takahashi Y., Nakagawa K., Okumura K., Nagase T., Nomura N., Kikuchi H., Masuho Y., Yamashita R., Nakai K., Yada T., Nakamura Y., Ohara O., Isogai T., Sugano S.Nat. Genet. 36:40-45(2004) DNA sequence of human chromosome 17 and analysis of rearrangement in the human lineage.Zody M.C., Garber M., Adams D.J., Sharpe T., Harrow J., Lupski J.R., Nicholson C., Searle S.M., Wilming L., Young S.K., Abouelleil A., Allen N.R., Bi W., Bloom T., Borowsky M.L., Bugalter B.E., Butler J., Chang J.L., Chen C.-K., Cook A., Corum B., Cuomo C.A., de Jong P.J., DeCaprio D., Dewar K., FitzGerald M., Gilbert J., Gibson R., Gnerre S., Goldstein S., Grafham D.V., Grocock R., Hafez N., Hagopian D.S., Hart E., Norman C.H., Humphray S., Jaffe D.B., Jones M., Kamal M., Khodiyar V.K., LaButti K., Laird G., Lehoczyk J., Liu X., Lokyitsang T., Loveland J., Lui A., Macdonald P., Major J.E., Matthews L., Mauceli E., McCarroll S.A., Mihalev A.H., Mudge J., Nguyen C., Nicol R., O'Leary S.B., Osoegawa K., Schwartz D.C., Shaw-Smith C., Stankiewicz P., Steward C., Swarbreck D., Venkataraman V., Whittaker C.A., Yang X., Zimmer A.R., Bradley A., Hubbard T., Birren B.W., Rogers J., Lander E.S., Nusbaum C.Nature 440:1045-1049(2006) Initial characterization of the human central proteome.Burkard T.R., Planyavsky M., Kaupe I., Breitwieser F.P., Buerckstuemmer T., Bennett K.L., Superti-Furga G., Colinge J.BMC Syst. Biol. 5:17-17(2011) An enzyme assisted RP-RPLC approach for in-depth analysis of human liver phosphoproteome.Bian Y., Song C., Cheng K., Dong M., Wang F., Huang J., Sun D., Wang L., Ye M., Zou H.J. Proteomics 96:253-262(2014)</p> |
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NCBI AND UNIPROT INFORMATION

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|----------------------------|--------------------------------------------------------------------------------|
| NCBI GI #                  | 731184190                                                                      |
| NCBI GeneID                | 2232                                                                           |
| NCBI Accession #           | NP_001244941.2                                                                 |
| NCBI GenBank Nucleotide #  | NM_001258012.3                                                                 |
| UniProt Accession #        | P22570; Q13716; Q4PJ10; Q9BU12; B4DDI7; B4DHX5; B4DQQ4; B4DX24; B7Z7G2; E7EQC1 |
| Molecular Weight           | 61.6 kDa                                                                       |
| NCBI Official Full Name    | NADPH:adrenodoxin oxidoreductase, mitochondrial isoform 3                      |
| UniProt Protein Name       | NADPH:adrenodoxin oxidoreductase, mitochondrial                                |
| UniProt Gene Name          | FDXR                                                                           |
| UniProt Synonym Gene Names | ADXR; AR; Adrenodoxin reductase; Ferredoxin reductase                          |
| UniProt Entry Name         | ADRO_HUMAN                                                                     |

**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.