

Recombinant human Aldo-keto reductase 1D1/AKR1D1 protein

Catalog Number: ATGP3292

PRODUCT INFORMATION

Expression system

E.coli

Domain

1-326aa

UniProt No.

P51857

NCBI Accession No.

NP_005980

Alternative Names

Aldo-keto reductase family 1 member D1, SRD5B1, Delta 4-3-ketosteroid-5-beta-reductase

PRODUCT SPECIFICATION

Molecular Weight

37.3 kDa (326aa)

Concentration

1mg/ml (determined by absorbance at 280nm)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.5) containing 1mM DTT, 0.1M NaCl, 10% glycerol

Purity

> 95% by SDS-PAGE

Endotoxin level

< 1 EU per 1ug of protein (determined by LAL method)

Tag

Non-Tagged

Application

SDS-PAGE

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

AKR1D1 also known as 3-oxo-5beta-steroid 4-dehydrogenase isoform 1, is a member of the AKR superfamily. The AKR family of proteins are soluble NADPH oxidoreductases. They play important roles in the metabolism of drugs, carcinogens and reactive aldehydes. AKR1D1 is responsible for the catalysis of the 5-beta-reduction of bile acid intermediates and steroid hormones which carry a delta (4) -3-one structure. AKR1D1 is highly expressed in

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liver, colon and testis. Deficiency of this enzyme may contribute to hepatic dysfunction. Recombinant AKR1D1 protein was expressed in E. coli and purified by using conventional chromatography techniques.

Amino acid Sequence

MDLSAASHRI PLSDGNSIPI IGLGTYSEPK STPKGACATS VKVAIDTGYR HIDGAYIYQN EHEVGGAIRE KIAEGKVRRE
DIFYCGKLWA TNHVPDMVRP TLERTLRVLQ LDYVDLYIIE VPMAFKPGDE IYPRDENGKW LYHKSNLCAE WEAMEACKDA
GLVKSLGVSF FNRRLQELIL NKPLGLKHKPV SNQVECHPYF TQPKLLKFCQ QHDIVITAYS PLGTSRNPIW VNVSSPPLLK
DALLNSLGKR YNKTAQAQVL RFNIQRGVVV IPKSFNLERI KENFQIFDFS LTEEEMKDIE ALNKNVRFVE LLMWRDHPEY
PFHDEY

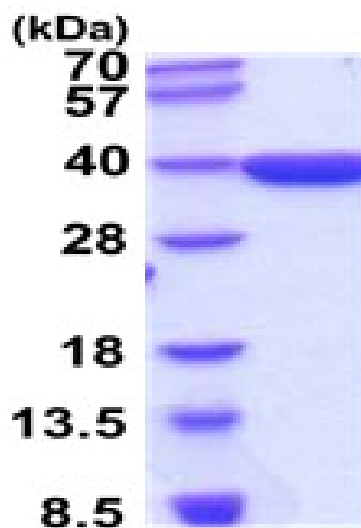
General References

Moore S A., et al. (1995) J Mol Biol. 249(1):195-214

Gould S J., et al. (1988) Anal Biochem. 175(1):5-13

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

15% SDS-PAGE (3ug)