Product information

Aldo-keto reductase family 1 member C4, 1-323aa

Human, Recombinant, *Ecoli*

Cat. No. IBATGP3277

NCBI Accession No.: NP_001809

Synonyms: 3-alpha-HSD, C11, CDR, CHDR, DD-4, DD4, HAKRA

Description: AKR1C1 also known as Aldo-keto reductase family 1 member C4, belongs to aldo/keto reductase superfamily, which consists of more than 40 known enzymes and proteins. It catalyzes the conversion of aldehydes and ketones to their corresponding alcohols by utilizing NADH and/or NADPH as cofactors. This enzyme catalyzes the bioreduction of chlordecone, a toxic organochlorine pesticide, to chlordecone alcohol in liver. Recombinant human AKR1C4 protein was expressed in *E.coli* and purified by using conventional chromatography.

Form: Liquid. In 20mM Tris-HCl buffer (pH 8.5) containing 0.1M NaCl,

10% glycerol, 1mM DTT

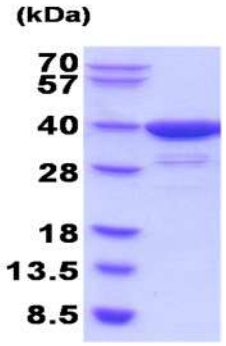
Molecular Weight: 37kDa (323aa)

Purity: > 90% by SDS - PAGE

Concentration: 1 mg/ml (determined by Bradford assay)

Endotoxin Level: < 1.0 EU per 1ug of protein (determined by LAL method)

Biological activity: Specific activity is > 700 pmol/min/ug, and is defined as the amount of enzyme that catalyze the oxidation of 1.0 pmole 1-Acenaphthenol in the presence of NADP per minute at pH 8.8 at 25C.



15% SDS-PAGE (3ug)

Sequences of aminoacids:

MDPKYQRVEL NDGHFMPVLG FGTYAPPEVP RNRAVEVTKL AIEAGFRHID SAYLYNNEEQ VGLAIRSKIA DGSVKREDIF YTSKLWCTFF
QPQMVQPALE SSLKKLQLDY VDLYLLHFPM ALKPGETPLP KDENGKVIFD TVDLSATWEV MEKCKDAGLA KSIGVSNFNC RQLEMILNKP
GLKYKPVCNQ VECHPYLNQS KLLDFCKSKD IVLVAHSALG TQRHKLWVDP NSPVLLEDPV LCALAKKHKR TPALIALRYQ LQRGVVVLAK
SYNEQRIREN IQVFEFQLTS EDMKVLDGLN RNYRYVVMDF LMDHPDYPFS DEY

General references:

Khanna M. *et al*. (1995) *Genomics.* 25(2):588-90.

Stayrook KR. *et al*. (2008) *Mol Pharmacol.* 73(2):607-12.

Storage: Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.

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