

AKR1C4, 1-323aa

Human, His-tagged, Recombinant, *E.coli*

Cat. No. IBATGP1106

Full name: Aldo-keto reductase family 1 member C4

NCBI Accession No.: NP_001809

Synonyms: DHEA-ST, DHEAS, HST, hSTa, ST2, ST2A1, ST2A3

Description: AKR1C4 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, fused to His-tag at N-terminus, was expressed in *E.coli* and purified by using conventional chromatography.

Form: Liquid. In 20mM Tris-HCl buffer (pH8.0) containing, 20% glycerol

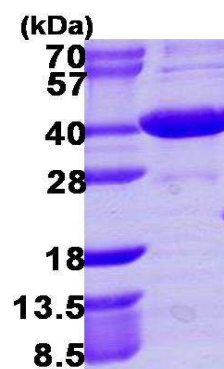
0.1M NaCl, 1mM DTT

Molecular Weight: 39.2 kDa (343aa), confirmed by MALDI-TOF

Purity: > 90% by SDS - PAGE

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

Biological activity: Specific activity is > 700 pmol/min/ug, and is defined as the amount of enzyme that catalyze the reduction of 1.0 pmole 3-chlorobenzaldehyde presence of NADP per minute at pH 8.8 at 25C.



15% SDS-PAGE (3ug)

Sequences of aminoacids:

MGSSHHHHHH SSSLVPRGSH MDPKYQRVEL NDGHFMPVLG FGTYAPPEVP RNRAVEVTKL AIEAGFRHID SAYLYNNEEQ VGLAIRSKIA
DGSVKREDIF YTSKLVCTFF QPQMVPAL E SSLKKLQLDY VDLYLLHFPM ALKPGETPLP KDENGKVIDF TVDLSATWEV MEKCKDAGLA
KSI GVSNFNC RQLEMILNKP GLKYKPV CNQ VECHPYLNQS KLLDFCKSKD IVLVAHSALG TQRHKLWVDP NSPVLLED PV LCALAKKHKR
TPALIALRYQ LQRGVVVLAK SYNEQRIREN IQVFEFQLTS EDMKVL DGLN RNYRYVVMDF LMDHPDYPFS DEY

General references:

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

Stayrook KR. et al. (2008) Mol Pharmacol. 73:607-612.

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.

For research use only. This product is not intended or approved for human, diagnostics or veterinary use.



Manufactured for:

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