

Aldo-keto reductase family 1 member C1, 1-323aa Human, Recombinant, *E. coli*

Cat. No. IBATGP3275

NCBI Accession No.: NP_001344

Synonyms: 2-ALPHA-HSD, 20-ALPHA-HSD, C9, DD1, DD1/DD2, DDH, DDH1, H-37, HAKRC, MBAB, MGC8954

Description: AKR1C1 also known as Aldo-keto reductase family 1 member C1, is member of the aldo/keto reductase superfamily, which consists of more than 40 known enzymes and proteins. These enzymes catalyze the conversion of aldehydes and ketones to their corresponding alcohols by utilizing NADH and/or NADPH as cofactors. The enzymes display overlapping but distinct substrate specificity. This enzyme catalyzes the reduction of progesterone to the inactive form 20-alpha-hydroxy-progesterone. Recombinant human AKR1C1 protein was expressed in *E. coli* and purified by using conventional chromatography techniques.

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

Molecular Weight: 36.7kDa (323aa)

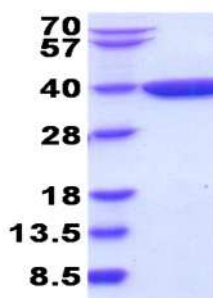
Purity: > 95% by SDS - PAGE

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 > 500 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.

(kDa)



15% SDS-PAGE (3ug)

Sequences of aminoacids:

MDSKYQCVKL NDGHFMPVLG FGTYAPAEVP KSKALEATKL AIEAGFRHID SAHLYNNEEQ VGLAIRSKIA DGSVKREDIF YTSKLVWCNSH
RPELVRPALE RSLKNLQLDY VDLYL IHFPV SVKPGEEVIP KDENGKILFD TVDLCATWEA VEKCKDAGLA KSIGVSNFNR RQLEMI LNKP
GLKYKPCNQ VECHPYFNQR KLLDFCKSKD IVLVAYSALG SHREEPWVDP NSPVLLEDPV LCALAKKHKR TPALIALRYQ LQRGVVVLAK
SYNEQRI RQN VQVFEFQLTS EEMKAIDGLN RNVRYLTLDI FAGPPNYPFS DEY

General references:

Zhang Y., *et al.* (2000) *J. Mol. Endocrinol.* 25(2):221-8.

Zhang Y., *et al.* (2009) *Mol Cell Endocrinol.* 298(1-2):76-83.

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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