

Aldo-keto reductase family 1 member C3 isoform 1, 1-323aa Human, Recombinant, *E. coli*

Cat. No. IBATGP3276

NCBI Accession No.: NP_003730

Synonyms: DD3, DDX, HA1753, HAKRB, HAKRe, hluPGFS, HSD17B5, PGFS

Description: AKR1C3 also known as Aldo-keto reductase family 1 member C3 isoform 1, is a member of the aldo-keto reductase superfamily which catalyzes the conversion of aldehydes and ketones to their corresponding alcohols by utilizing NADH and/or NADPH as cofactors. This enzyme catalyzes the reduction of prostaglandin (PG) D2, PGH2 and phenanthrenequinone (PQ), and the oxidation of 9 alpha, 11 beta-PGF2 to PGD2. It may play an important role in the pathogenesis of allergic diseases such as asthma, and may also have a role in controlling cell growth and differentiation. Recombinant human AKR1C3 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,

10% glycerol, 1mM DTT

Molecular Weight: 36.8kDa (323aa)

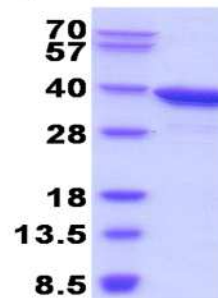
Purity: > 90% by SDS - PAGE

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 > 1,000 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:

MDSKHQCVKL NDGHFMPVLG FGTYAPPEVP RSKALEVTKL AIEAGFRHID SAHLYNNEEQ VGLAIRSKIA DGSVKREDIF YTSKLWSTFH
RPELVPALE NSLKKAQLDY VDLYLIHSPM SLKPGEELSP TDENGKVIDF IVDLCTTWEA MEKCKDAGLA KSIGVSNFNR RQLEMILNKP
GLKYKPVNCQ VECHPYFNRS KLLDFCKSKD IVLVAYSALG SQDRKRWVDP NSPVLLEDPV LCALAKKHKR TPALIALRYQ LQRGVVVLAK
SYNEQRI RQN VQVFEFQLTA EDMKAIDGLD RNLHYFNSDS FASHPNYPYS DEY

General references:

Davies NJ., *et al.* (2009) *Cancer Res.* 69(11):4769-75.

Kabututu Z., *et al.* (2009) *J Biochem.* 145(2):161-8.

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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