

Product information

ADH5, 1-374aa

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

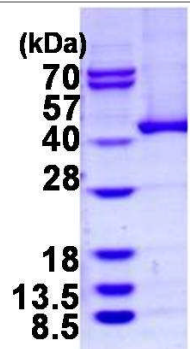
Cat. No. IBATGP1471

Full name: Alcohol dehydrogenase class-3

NCBI Accession No.: NP_000662

Synonyms: ADHX, FDH

Description: ADH5 is a member of the alcohol dehydrogenase family. Members of this family metabolize a wide variety of substrates, including ethanol, retinol, other aliphatic alcohols, hydroxysteroids, and lipid peroxidation products. It has virtually no activity for ethanol oxidation, but exhibits high activity for oxidation of long-chain primary alcohols and for oxidation of S-hydroxymethyl-glutathione, a spontaneous adduct between formaldehyde and glutathione. This enzyme is an important component of cellular metabolism for the elimination of formaldehyde, a potent irritant and sensitizing agent that causes lacrymation, rhinitis, pharyngitis, and contact dermatitis. Recombinant human ADH5 protein, fused to His-tag at N-terminus, was expressed in *E.coli* and purified by using conventional chromatography techniques.

<p>Form: Liquid. 20mM Tris-HCl buffer (pH7.5) containing 20% glycerol 0.1M NaCl, 1mM DTT</p> <p>Molecular Weight: 42.3 kDa (398aa), confirmed by MALDI-TOF</p> <p>Purity: > 90% by SDS - PAGE</p> <p>Concentration: 1.0 mg/ml (determined by Bradford assay)</p>	 <p>15% SDS-PAGE (3ug)</p>
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Sequences of amino acids:

MGSSHHHHHH SSSLVPRGSH MGSHPMANEVI KCKAAVAWEA GKPLSIEEIE VAPPKAHEVR IKI IATAVCH TDAYTLGAD PEGCFPVILG
HEGAGIVESV GEGVTKLKAG DTVIPLYIPQ CGECKFCLNP KTNLCQKIRV TQGKGLMPDG TSRFTCKGKT ILHYMGSTSF SEYTVVADIS
VAKIDPLAPL DKVCLLGGCI STGYGAAVNT AKLEPGSVCA VFGLGGVGLA VIMGCKVAGA SRIIGVDINK DKFARAKEFG ATECINPQDF
SKPIQEVLEI MTDGGVDYSF ECIGNVKVMR AALEACHKGW GVSVVVGVA A SGEEIATRPF QLVTRGTWKG TAFGGWKSVE SVPKLVSEYM
SKKIKVDEFV THNLSFDEIN KAFELMHS GK SIRTVVKI

General references:

Zhang,X. *et al.* (2010) Carcinogenesis 31 (12), 2118-2123

Shimada,M. *et al.* (2010) Hum. Genet. 128 (4), 433-441

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.