

Recombinant Human ALDH5A1, His-tagged

Cat. No. ALDH5A1-2821H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant humanALDH5A1 protein,fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques. MW = 54.6 kDa (509aa), confirmed by MALDI-TOF.
Species	Human
Source	E.coli
Description	ALDH5A1 belongs to the aldehyde dehydrogenase family of proteins. This protein functions as a mediate the NADP+-dependent oxidation of aldehydes into acids and plays an important role in the detoxification of alcohol-derived acetaldehyde, as well as in lipid peroxidation and in the metabolism of corticosteroids, biogenic amines and neurotransmitters. ALDH5A1 is expressed in a variety of tissues, including liver, heart, lung, brain, kidney and placenta.
Sequences Of Amino Acids	MGSSHHHHHH SSGLVPRGSH MAGRLAGLSA ALLRTDSFVG GRWLPAAATF PVQDPASGAA LGMVADCGVR EARAAVRAAY EAFCRWREVS AKERSSLLRK WYNLMIQNKD DLARIITAES GKPLKEAHGE ILYSAFFLEW FSEEARRVYG DIIHTPAKDR RALVLKQPIG VAAVITPWNF PSAMITRKVG AALAAGCTVV VKPAEDTPFS ALALAEASQ AGIPSGVYNV IPCSRKNAKE VGEAICTDPL VSKISFTGST TTGKILLHHA ANSVKRVSME LGGLAPFIVF DSANVDQAVA GAMASKFRNT GQTCVCSNQF LVQRGIHDAF VKAFAEAMKK NLRVGNNGFEE GTTQGPLINE KAVEKVEKQV NDAVSKGATV VTGGKRHQLG KNFFEPTLLC NVTQDMLCTH EETFGPLAPV IKFDTEEEAI AIANAADVGL AGYFYSQDPA

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QIWRVAEQLE VGMVGVNEGL ISSVECPFGG VKQSGLGREG SKYGIDEYLE
LKYVCYGGGL

Purity > 90% by SDS – PAGE.

Form Liquid. In 20mM Tris-HCl buffer (pH 8.0) containing 10% glycerol 1mM DTT, 0.1M NaCl, 1mM EDTA.

Concentration 0.5 mg/ml (determined by Bradford assay).

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.

GENE INFORMATION

Gene Name [ALDH5A1 aldehyde dehydrogenase 5 family, member A1 \[Homo sapiens \]](#)

Synonyms ALDH5A1; aldehyde dehydrogenase 5 family, member A1; SSDH; SSADH; succinate-semialdehyde dehydrogenase, mitochondrial; OTTHUMP00000214394; aldehyde dehydrogenase family 5 member A1; mitochondrial succinate semialdehyde dehydrogenase; NAD(+)-dependent succinic semialdehyde dehydrogenase; EC 1.2.1.24

Gene ID [7915](#)

mRNA Refseq [NM_001080](#)

Protein Refseq [NP_001071](#)

MIM [610045](#)

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UniProt ID	P51649
Chromosome Location	6p22
Pathway	Alanine, aspartate and glutamate metabolism; Butanoate metabolism; Metabolic pathways
Function	oxidoreductase activity; protein homodimerization activity; succinate-semialdehyde dehydrogenase activity

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