

AR09661PU-L**Human ALDH5A1 / SSADH (48-535, His-tag) - Purified****Alternate names:**

Aldehyde dehydrogenase family 5 member A1, NAD(+)-dependent succinic semialdehyde dehydrogenase, Succinate-semialdehyde dehydrogenase, mitochondrial

Quantity:

0.25 mg

Concentration:

0.5 mg/ml (determined by Bradford assay)

Background:

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.

Uniprot ID:

[P51649](#)

NCBI:

[NP_001071](#)

GeneID:

[7915](#)

Species:

Human

Source:

E. coli

Format:

State: Liquid purified protein

Purity: >90% by SDS – PAGE

Buffer System: 20mM Tris-HCl buffer (pH 8.0) containing 10% glycerol, 1mM DTT, 0.1M NaCl, 1mM EDTA

Description:

Recombinant human ALDH5A1 protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.

AA Sequence:

MGSSHHHHHH SSGLVPRGSH MAGRLAGLSA ALLRTDSFVG GRWLPAAATF PVQDPASGAA
LGMVADCGVR EARAAVRAAY EAFRCWREVS AKERSLLLRK WYNLMIQNKD DLARIITAES
GKPLKEAHGE ILYSAFFLEW FSEEARVYVYG DIIHTPAKDR RALVLKQPIG VAAVITPWNF
PSAMITRKVG AALAAGCTVV VKPAEDTPFS ALALAEASQ AGIPSGVYVYV IPCSRKNAKE
VGEAICTDPL VSKISFTGST TTGKILLHHA ANSVKRVSME LGGLAPFIVF DSANVDQAVA
GAMASKFRNT GQTCVCSNQF LVQRGIHDAF VKAFAEAMKK NLRVGNGFEE GTTQGPLINE
KAVEKVEKQV NDAVSKGATV VTGGKRHQLG KNFFFEPTLLC NVTQDMLCTH EETFGPLAPV
IKFDTEEEAI AIANAADVGL AGYFYSQDPA QIWRVAEQLE VGMVGVNEGL ISSVECPFGG
VKQSGLGREG SKYGIDEYLE LKYVCYGG

Molecular weight: 54.6 kDa (509aa), confirmed by MALDI-TOF

Storage:

Store undiluted at 2-8°C for up to two weeks or (in aliquots) at -20°C or -70°C for longer.

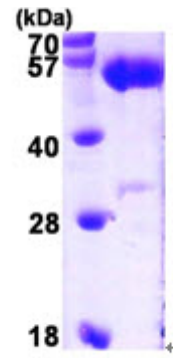
Avoid repeated freezing and thawing.

Shelf life: one year from despatch.

General Readings:

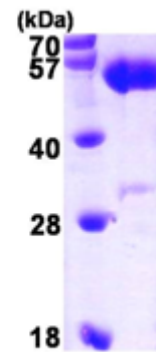
Akaboshi S., et al. (2003) Hum Mutat. 22(6):442-50.

Pictures:



15% SDS-PAGE (3ug)

Recombinant human ALDH5A1, 48-535 aa, His-tagged



15% SDS-PAGE (3ug)