

# Recombinant human ALDH5A1 protein

Catalog Number: ATGP0723

## PRODUCT INFORMATION

---

### Expression system

E.coli

### Domain

48-535aa

### UniProt No.

P51649

### NCBI Accession No.

NP\_001071.1

### Alternative Names

Succinate-semialdehyde dehydrogenase mitochondrial, SSADH, SSDH, Succinate-semialdehyde dehydrogenase, mitochondrial

## PRODUCT SPECIFICATION

---

### Molecular Weight

54.6 kDa (509aa) confirmed by MALDI-TOF

### Concentration

0.5mg/ml (determined by Bradford assay)

### Formulation

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

### Purity

> 90% by SDS-PAGE

### Tag

His-Tag

### Application

SDS-PAGE

### Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

---

### Description

ALDH5A1 belongs to the aldehyde dehydrogenase family of proteins. This protein functions as a mediator of the NADP<sup>+</sup>-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. Recombinant human ALDH5A1 protein, fused to His-tag at N-terminus, was expressed in E. coli

# Recombinant human ALDH5A1 protein

Catalog Number: ATGP0723

and purified by using conventional chromatography techniques.

## Amino acid Sequence

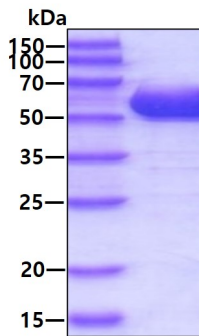
<MGSSHHHHHH SSGLVPRGSH M>AGRLAGLSA ALLRTDSFVG GRWLPAAATF PVQDPASGAA LGMVADCGVR  
EAAAVRAAY EAFCRWREVS AKERSSLLRK WYNLMIQNKD DLARIITAES GKPLKEAHGE ILYSAFFLEW FSEEARRVYG  
DIIHTPAKDR RALVLKQPIG VAAVITPWNF PSAMITRKVG AALAAGCTVV VKPAEDTPFS ALALAEASQ AGIPSGVYNV  
IPCSRKNAKE VGEAICTDPL VSKISFTGST TTGKILLHHA ANSVKRVSME LGGLAPFIVF DSANVDQAVA GAMASKFRNT  
GQTCVCSNQF LVQRGIHDAF VKAFAEAMKK NLRVGNFEE GTTQGPLINE KAVEKVEKQV NDAVSKGATV VTGGKRHQLG  
KNFFPEPTLLC NVTQDMLCTH EETFGPLAPV IKFDTEEEAI AIANAADVGL AGYFYSQDPA QIWRVAEQLE VGMVGVNEGL  
ISSVECPFGG VKQSGLGREG SKYGIDEYLE LKYVCYGG

## General References

Thomasson HR., et al. (1991) Am J Hum Genet. 48(4):677-81.  
Akaboshi S., et al. (2003) Hum Mutat. 22(6):442-50.

## DATA

### SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.