

Datasheet for ABIN7556368  
**P5CS Protein (AA 1-795) (His tag)**



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## Overview

Quantity:	1 mg
Target:	P5CS (ALDH18A1)
Protein Characteristics:	AA 1-795
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This P5CS protein is labelled with His tag.

## Product Details

Purpose:	Custom-made recombinant Aldh18a1 Protein expressed in mammalian cells.
Sequence:	<p>MLRHMHRSGV QPFRQRLPW VQSIAPRSN RVQPSAIRHV RSWSNIPFIT VPLSRAHGKP</p> <p>FAHRSELKHA KRIVVKLGSA VVTRGDECGL ALGRLASIVE QSVLQNGQR EMMMLVTSGAV</p> <p>AFGKQRLRHE ILLSQSVRQA LHSGQNLHKE MAIPVLEARA CAAAGQSGLM ALYEAMFTQY</p> <p>SICAAQILVT NLDFHDEQKR RNLNGTLHEL LRMNIVPIVN TNDVVPPAE PNSDLQGVNV</p> <p>ISVKDNDSLA ARLAVEMKTD LLVLSDVEG LFDSPPGSDD AKLIDIFYPG DQSVTFGTK</p> <p>SRVGLGGMEA KVKAALWALQ GGTSVVIANG THPKVSGHVI TDIVEGKKVG TFFSEVKPAG</p> <p>PTVEQQGEMA RSGGRMLATL EPEQRAEIN HLADLLTDQR EEILLANKKD LEEAEGRLAS</p> <p>PLLKRLSLST SKLNLSAIGL RQIAASSQES VGRVLRRTRI AKNLELEQVT VPIGVLLVIF</p> <p>ESRPDCLPQV AALAIASGNG LLLKGGKEAA HSNRILHLLT QEALSIHGVK EAIQLVNTRE</p> <p>EVEDLCRLDK IIDLIIPRGS SQLVRDIQKA AKGIPVMGHS EGICHMYVDS EASVDKVTRL</p> <p>VRDSKCEYPA ACNALETLI HRDLLRTPLF DQIIDMLRVE QVKIHAGPKF ASYLTFSPSE</p> <p>VKSLRTEYGD LEVCIEVVDS VQEAIDHIHK YGSSHTDVIV TENEKTAEFF LQHVDLSACVF</p>

## Product Details

WNASTRFSDG YRFG LGAEVG ISTSRIHARG PVGLEGLTT KWLLRGQDHV VSDFSEHGSL  
KYLHENLPVP QRNFS **Sequence without tag. The proposed Purification-Tag is based on experiences with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.**

**Specificity:** If you are looking for a specific domain and are interested in a partial protein or a different isoform, please contact us regarding an individual offer.

**Characteristics:** **Key Benefits:**

- Made to order protein - from design to production - by highly experienced protein experts.
- Protein expressed in mammalian cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.

If you are not interested in a full length protein, please contact us for individual protein fragments.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

**Purity:** > 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC)

**Grade:** custom-made

## Target Details

**Target:** P5CS (ALDH18A1)

**Alternative Name:** Aldh18a1 ([ALDH18A1 Products](#))

**Background:** Delta-1-pyrroline-5-carboxylate synthase (P5CS) (Aldehyde dehydrogenase family 18 member A1) [Includes: Glutamate 5-kinase (GK) (EC 2.7.2.11) (Gamma-glutamyl kinase), Gamma-glutamyl phosphate reductase (GPR) (EC 1.2.1.41) (Glutamate-5-semialdehyde dehydrogenase) (Glutamyl-gamma-semialdehyde dehydrogenase)],FUNCTION: Bifunctional enzyme that converts glutamate to glutamate 5-semialdehyde, an intermediate in the biosynthesis of proline, ornithine and arginine. {ECO:0000250|UniProtKB:P54886}.

## Target Details

Molecular Weight: 87.3 kDa

UniProt: [Q9Z110](#)

## Application Details

Application Notes: We expect the protein to work for functional studies. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Restrictions: For Research Use only

## Handling

Format: Liquid

Buffer: The buffer composition is at the discretion of the manufacturer.

Handling Advice: Avoid repeated freeze-thaw cycles.

Storage: -80 °C

Storage Comment: Store at -80°C.

Expiry Date: 12 months