

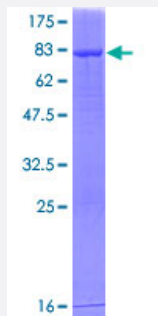
## Full-Length

# ALDH1A2 (Human) Recombinant Protein (P01)

Catalog # H00008854-P01

Size 25 ug, 10 ug

## Applications



## Specification

### Product Description

Human ALDH1A2 full-length ORF ( NP\_733797.1, 1 a.a. - 480 a.a.) recombinant protein with GST-tag at N-terminal.

### Sequence

MTSSKIEMPGEVKADPAALMASLHLLPSPTPNLEIKYTKIFINNEWQNSESGRVFPVYNPATGEQV  
CEVQEADKADIDKAVQAARLAFSLGSVWRRMDASERGRLLDKLADLVERDRAVLATMESLNGG  
KPFLQAFYVDLQGVIKTFRYAGWADKIHGMTIPVDGDYFTFTRHEPIGVCGQIIPWNFPLLMFAWKI  
APALCCGNTTVVIKPAEQTPLSALYMGALIKEVGKLIQEAAGRSNLKRVTLLELGGKSPNIIFADADLD  
YAVEQAHQGVFFNQGCCCTAGSRIFVEESYEEFVRRSVERAKRRVVGSPFDPTEQQGPQIDKKQ  
YNKILELIQSGVAEGAKLECGGKGLGRKGFFIEPTVFSNVTDMDRIAKEEIFGPVQEILRFKTMDEVI  
ERANNPDFGLVAAVFTNDINKALTVSSAMQAGTVWINCYNALNAQSPFGGFKMSGNGREMGEFG  
LREYSEVKTVTVKIPQKNS

### Host

Wheat Germ (in vitro)

### Theoretical MW (kDa)

79.5

### Interspecies Antigen Sequence

Mouse (90); Rat (90)

### Preparation Method

[in vitro wheat germ expression system](#)

### Purification

Glutathione Sepharose 4 Fast Flow

### Quality Control Testing

12.5% SDS-PAGE Stained with Coomassie Blue.

|                     |                                                                          |
|---------------------|--------------------------------------------------------------------------|
| Storage Buffer      | 50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer. |
| Storage Instruction | Store at -80°C. Aliquot to avoid repeated freezing and thawing.          |
| Note                | Best use within three months from the date of receipt of this protein.   |

## Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

## Gene Info — ALDH1A2

|                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Entrez GeneID       | <a href="#">8854</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| GeneBank Accession# | <a href="#">NM_170696.1</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Protein Accession#  | <a href="#">NP_733797.1</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Gene Name           | ALDH1A2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Gene Alias          | MGC26444, RALDH(II), RALDH2, RALDH2-T                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Gene Description    | aldehyde dehydrogenase 1 family, member A2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Omim ID             | <a href="#">603687</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Gene Ontology       | <a href="#">Hyperlink</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Gene Summary        | <p>This protein belongs to the aldehyde dehydrogenase family of proteins. The product of this gene is an enzyme that catalyzes the synthesis of retinoic acid (RA) from retinaldehyde. Retinoic acid, the active derivative of vitamin A (retinol), is a hormonal signaling molecule that functions in developing and adult tissues. The studies of a similar mouse gene suggest that this enzyme and the cytochrome CYP26A1, concurrently establish local embryonic retinoic acid levels which facilitate posterior organ development and prevent spina bifida. Three transcript variants encoding distinct isoforms have been identified for this gene. [provided by RefSeq]</p> |
| Other Designations  | aldehyde dehydrogenase 1A2 retinaldehyde dehydrogenase 2 retinaldehyde-specific dehydrogenase type 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

## Pathway

- [Metabolic pathways](#)
- [Retinol metabolism](#)

## Disease

- [Genetic Predisposition to Disease](#)
- [Heart Defects](#)
- [Kidney Diseases](#)
- [Meningomyelocele](#)
- [Schizophrenia](#)
- [Tetralogy of Fallot](#)
- [Tobacco Use Disorder](#)
- [Vitamin A Deficiency](#)