

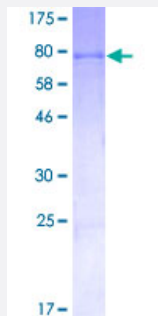
Full-Length

ALDH2 (Human) Recombinant Protein (P01)

Catalog # H00000217-P01

Size 25 ug, 10 ug

Applications



Specification

Product Description

Human ALDH2 full-length ORF (NP_000681.2, 1 a.a. - 517 a.a.) recombinant protein with GST-tag at N-terminal.

Sequence

MLRAARFGPRLGRRLLSAAATQAVPAPNQQPEVFCNQIFINNEWHDAVSRKTFPTVNPSTGEVI
CQVAEGDKEDVDKAVKAARAAFQLGSPWRRMDASHRGRLNRLADLIERDRTYLAALETLDNG
KPYVISYLVLDMLVKCLRYAGWADKYHGKTIPIDGDFSYTRHEPVGVCGQIIPWNFPLLMQAW
KLGALATGNVVMKVAEQTPLTALYVANLIKEAGFPPGVVNIVPGFGPTAGAAIASHEDVDKVAF
TGSTEIGRVIQVAAGSSNLKRVTLLELGGKSPNIIMSDADMWDWAVEQAHFALFFNQGCCAGSRT
FVQEDIYDEFVERSVARAKSRVVGPNPFDKTEQGPQVDETQFKKILGYINTGKQEGAKLLCGGIA
ADRGYFIQPTVFGDVQDGMTIAKEEIFGPVMQILKFKTIEEVVGRANNSTYGLAAAVFTKDLDKANY
LSQALQAGTVVWNCYDVFGAQSPFGGYKMSGSGRELGEYGLQAYTEVKTVTVKVPQKNS

Host

Wheat Germ (in vitro)

Theoretical MW (kDa)

82.8

Interspecies Antigen Sequence

Mouse (95)

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 — ALDH2

Entrez GeneID	217
GeneBank Accession#	NM_000690.2
Protein Accession#	NP_000681.2
Gene Name	ALDH2
Gene Alias	ALDH-E2, ALDHI, ALDM, MGC1806
Gene Description	aldehyde dehydrogenase 2 family (mitochondrial)
Omim ID	100650
Gene Ontology	Hyperlink

Gene Summary	This protein belongs to the aldehyde dehydrogenase family of proteins. Aldehyde dehydrogenase is the second enzyme of the major oxidative pathway of alcohol metabolism. Two major liver isoforms of this enzyme, cytosolic and mitochondrial, can be distinguished by their electrophoretic mobilities, kinetic properties, and subcellular localizations. Most Caucasians have two major isozymes, while approximately 50% of Orientals have only the cytosolic isozyme, missing the mitochondrial isozyme. A remarkably higher frequency of acute alcohol intoxication among Orientals than among Caucasians could be related to the absence of the mitochondrial isozyme. This gene encodes a mitochondrial isoform, which has a low Km for acetaldehydes, and is localized in mitochondrial matrix. [provided by RefSeq]
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Other Designations

ALDH class 2|acetaldehyde dehydrogenase 2|liver mitochondrial ALDH|mitochondrial aldehyde dehydrogenase 2|nucleus-encoded mitochondrial aldehyde dehydrogenase 2

Pathway

- [3-Chloroacrylic acid degradation](#)
- [Arginine and proline metabolism](#)
- [Ascorbate and aldarate metabolism](#)
- [beta-Alanine metabolism](#)
- [Butanoate metabolism](#)
- [Fatty acid metabolism](#)
- [Glycerolipid metabolism](#)
- [Glycolysis / Gluconeogenesis](#)
- [Histidine metabolism](#)
- [Limonene and pinene degradation](#)
- [Lysine degradation](#)
- [Metabolic pathways](#)
- [Propanoate metabolism](#)
- [Pyruvate metabolism](#)
- [Tryptophan metabolism](#)
- [Valine](#)

Disease

- [Acute Disease](#)
- [Adenocarcinoma](#)
- [Adenoma](#)
- [Adenomatous Polyps](#)

- [Alcohol Withdrawal Delirium](#)
- [Alcoholic Intoxication](#)
- [Alcoholic Neuropathy](#)
- [Alcoholism](#)
- [Alcohol-Related Disorders](#)
- [Alzheimer disease](#)
- [Angina Pectoris](#)
- [Antisocial Personality Disorder](#)
- [Asthma](#)
- [Atherosclerosis](#)
- [Atrophy](#)
- [Attention Deficit Disorder with Hyperactivity](#)
- [Behavior Control](#)
- [Brain Infarction](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Calcinosis](#)
- [Carcinoma](#)
- [Cardiovascular Diseases](#)
- [Carotid Artery Diseases](#)
- [Cell Transformation](#)
- [Cocarcinogenesis](#)
- [Cognition Disorders](#)
- [Colon cancer](#)
- [Colonic Neoplasms](#)
- [Colonic Polyps](#)

- [Colorectal Neoplasms](#)
- [Coronary Artery Disease](#)
- [Coronary Disease](#)
- [Dementia](#)
- [Dermatitis](#)
- [Diabetes Mellitus](#)
- [Diabetic Angiopathies](#)
- [Diabetic Neuropathies](#)
- [Diabetic Retinopathy](#)
- [Digestive System Neoplasms](#)
- [Disease Models](#)
- [Disease Progression](#)
- [Disease Susceptibility](#)
- [Diseases in Twins](#)
- [DNA Damage](#)
- [Drug Hypersensitivity](#)
- [Ductus Arteriosus](#)
- [Ectodermal Dysplasia](#)
- [Edema](#)
- [Esophageal Neoplasms](#)
- [Fatty Liver](#)
- [Femur Head Necrosis](#)
- [Flushing](#)
- [Gastritis](#)
- [Gastrointestinal Neoplasms](#)
- [Genetic Predisposition to Disease](#)

- [Genomic Instability](#)
- [Head and Neck Neoplasms](#)
- [Heart Diseases](#)
- [Helicobacter Infections](#)
- [Hepatitis](#)
- [Hepatitis C](#)
- [Hypersensitivity](#)
- [Hypertension](#)
- [Infant](#)
- [Kidney Failure](#)
- [Laryngeal Neoplasms](#)
- [Liver Cirrhosis](#)
- [Liver Diseases](#)
- [Liver Neoplasms](#)
- [Lung Neoplasms](#)
- [Melanosis](#)
- [Mesothelioma](#)
- [Metabolic Syndrome X](#)
- [Metaplasia](#)
- [Micronuclei](#)
- [Mouth Neoplasms](#)
- [Myocardial Infarction](#)
- [Neoplasm Invasiveness](#)
- [Neoplasm Metastasis](#)
- [Neoplasms](#)
- [Neuropsychological Tests](#)

- [Obesity](#)
- [Obstetric Labor](#)
- [Occupational Diseases](#)
- [Oropharyngeal Neoplasms](#)
- [Osteonecrosis](#)
- [Osteoporosis](#)
- [Pancreatic cancer](#)
- [Pancreatic Neoplasms](#)
- [Pancreatitis](#)
- [Peptic Ulcer](#)
- [Perception](#)
- [Periodontal Pocket](#)
- [Periodontitis](#)
- [Pharyngeal Neoplasms](#)
- [Pleural Neoplasms](#)
- [Precancerous Conditions](#)
- [Pregnancy Complications](#)
- [Prostatic Neoplasms](#)
- [Psychiatric Status Rating Scales](#)
- [Psychology](#)
- [Psychomotor Performance](#)
- [Pulmonary Disease](#)
- [Reaction Time](#)
- [Rectal Neoplasms](#)
- [Retinopathy of Prematurity](#)
- [Schizophrenia](#)

- [Sensation](#)
- [Set \(Psychology\)](#)
- [Stomach Neoplasms](#)
- [Substance Withdrawal Syndrome](#)
- [Unconsciousness](#)
- [Urinary Bladder Neoplasms](#)
- [Werner syndrome](#)
- [Wounds and Injuries](#)