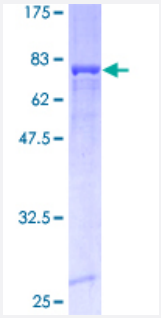
Full-Length

ALDH3A1 (Human) Recombinant Protein (P01)

Catalog # H00000218-P01 Size 25 ug, 10 ug

Applications



Specification

Product Description	Human ALDH3A1 full-length ORF (AAH04370, 1 a.a. - 453 a.a.) recombinant protein with GST-tag a t N-terminal.
Sequence	MSKISEAVKRARAAFSSGRTRPLQFRIQQLEALQRLIQEQEQELVGALAADLHKNEWNAYYEEVV YVLEEIEYMIQKLPEWAADEPVEKTPQTQQDELYIHSEPLGVVLVIGTWNYPFNLTIQPMVGAIAAG NAVVLKPSELSENMASLLATIIPQYLDKDLYPVINGGVPETTELLKERFDHILYTGSTGVGKIIMTAAA KHLTPVTLELGGKSPCYVDKNCDLDVACRRIAWGKFMNSGQTCVAPDYILCDPSIQNQIVEKLKK SLKEFYGEDAKKSRDYGRIISARHFQRVMGLIEGQKVAYGGTGDAATRYIAPTILTDGDPQSPVMQ EEIFGPVLPIVCVRSLEEAIQFINQREKPLALYMFSSNDKVIKKMIAETSSGGVAANDVIVHITLHSLP FGGVGNSGMGSYHGKKSFETFSHRRSCLVRPLMNDGGLKVRYPPSPAKMTQH
Host	Wheat Germ (in vitro)
Theoretical MW (kDa)	75.35
Interspecies Antigen Sequence	Mouse (80); Rat (81)
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 — ALDH3A1

Entrez GeneID	218
GeneBank Accession#	BC004370
Protein Accession#	AAH04370
Gene Name	ALDH3A1
Gene Alias	ALDH3, ALDHIII, MGC10406
Gene Description	aldehyde dehydrogenase 3 family, memberA1
Omim ID	100660
Gene Ontology	Hyperlink
Gene Summary	Aldehyde dehydrogenases oxidize various aldehydes to the corresponding acids. They are involved in the detoxification of alcohol-derived acetaldehyde and in the metabolism of corticosteroids, biogenic amines, neurotransmitters, and lipid peroxidation. The enzyme encoded by this gene forms a cytoplasmic homodimer that preferentially oxidizes aromatic and medium-chain (6 carbons or more) saturated and unsaturated aldehyde substrates. It is thought to promote resistance to UV and 4-hydroxy-2-nonenal-induced oxidative damage in the cornea. The gene is located within the Smith-Magenis syndrome region on chromosome 17. Multiple alternatively spliced variants, encoding the same protein, have been identified. [provided by RefSeq
Other Designations	aldehyde dehydrogenase 3A1|aldehyde dehydrogenase isozyme 3|aldehyde dehydrogenase type III|aldehyde dehydrogenase, dimeric NADP-preferring|stomach aldehyde dehydrogenase

Pathway

- Drug metabolism - cytochrome P450
- Glycolysis / Gluconeogenesis
- Histidine metabolism
- Metabolic pathways
- Metabolism of xenobiotics by cytochrome P450
- Phenylalanine metabolism
- Tyrosine metabolism

Disease

- Attention Deficit Disorder with Hyperactivity
- Autistic Disorder
- Brain Neoplasms
- Breast cancer
- Breast Neoplasms
- Carcinoma
- Drug Toxicity
- Genetic Predisposition to Disease
- Kidney Failure
- NARP
- Neoplasms
- Ovarian cancer
- Ovarian Neoplasms
- Schizophrenia
- Tobacco Use Disorder