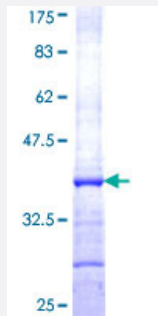


ADH1A (Human) Recombinant Protein (Q01)

Catalog # H00000124-Q01

Size 25 ug, 10 ug

Applications



Specification

Product Description	Human ADH1A partial ORF (NP_000658, 298 a.a. - 375 a.a.) recombinant protein with GST-tag at N-terminal.
Sequence	DSQNLSMNPM LLLTGRTWK GAILGGFKSKECV PKLVADFM AKKFSLDALITHVLPFEKINEGFDLL HSGKSIRTILMF
Host	Wheat Germ (in vitro)
Theoretical MW (kDa)	34.32
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 — ADH1A

Entrez GeneID [124](#)

GeneBank Accession# [NM_000667](#)

Protein Accession# [NP_000658](#)

Gene Name ADH1A

Gene Alias ADH1

Gene Description alcohol dehydrogenase 1A (class I), alpha polypeptide

Omim ID [103700](#)

Gene Ontology [Hyperlink](#)

Gene Summary This gene encodes class I alcohol dehydrogenase, alpha subunit, which is a member of the alcohol dehydrogenase family. Members of this enzyme family metabolize a wide variety of substrates, including ethanol, retinol, other aliphatic alcohols, hydroxysteroids, and lipid peroxidation products. Class I alcohol dehydrogenase, consisting of several homo- and heterodimers of alpha, beta, and gamma subunits, exhibits high activity for ethanol oxidation and plays a major role in ethanol catabolism. Three genes encoding alpha, beta and gamma subunits are tandemly organized in a genomic segment as a gene cluster. This gene is monomorphic and predominant in fetal and infant livers, whereas the genes encoding beta and gamma subunits are polymorphic and strongly expressed in adult livers. [provided by RefSeq]

Other Designations ADH, alpha subunit|alcohol dehydrogenase 1 (class I), alpha polypeptide|aldehyde reductase|class I alcohol dehydrogenase, alpha subunit

Publication Reference

- [In vitro metabolism of a novel JNK inhibitor tanzisertib: interspecies differences in oxido-reduction and characterization of enzymes involved in metabolism.](#)

Atsriku C, Hoffmann M, Moghaddam M, Kumar G, Surapaneni S.

Xenobiotica 2015 Jun; 45(6):465.

Application: Enzyme, Human, Tanzisertib were incubated in human liver microsomes, cytosol and hepatocytes

- [ADH IB Expression, but Not ADH III, Is Decreased in Human Lung Cancer.](#)

Mutka SC, Green LH, Verderber EL, Richards JP, Looker DL, Chlipala EA, Rosenthal GJ.

PLoS One 2012 Dec; 7(12):e52995.

Application: WB, Human, Recombinant proteins

Pathway

- [1- and 2-Methylnaphthalene degradation](#)
- [3-Chloroacrylic acid degradation](#)
- [Drug metabolism - cytochrome P450](#)
- [Fatty acid metabolism](#)
- [Glycolysis / Gluconeogenesis](#)
- [Metabolic pathways](#)
- [Metabolism of xenobiotics by cytochrome P450](#)
- [Retinol metabolism](#)
- [Tyrosine metabolism](#)

Disease

- [Alcoholism](#)
- [Alzheimer disease](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Carcinoma](#)

- [Cardiovascular Diseases](#)
- [Cleft Lip](#)
- [Cleft Palate](#)
- [Colorectal Neoplasms](#)
- [Diabetes Complications](#)
- [Diabetes Mellitus](#)
- [Disease Models](#)
- [Edema](#)
- [Genetic Predisposition to Disease](#)
- [Huntington disease](#)
- [Metabolic Syndrome X](#)
- [Mouth Neoplasms](#)
- [Neoplasms](#)
- [Osteoporosis](#)
- [Parkinson disease](#)
- [Pharyngeal Neoplasms](#)
- [Stomach Neoplasms](#)
- [Substance-Related Disorders](#)
- [Tremor](#)