

## Recombinant Human ALDH1A1, GST-tagged

Cat. No. ALDH1A1-9550H Lot. No. (See product label)

### SPECIFICATION

<b>Product Overview</b>	Recombinant Human ALDH1A1 protein, fused to GST-tag, was expressed in E.coli and purified by GSH-sepharose.
<b>Species</b>	Human
<b>Source</b>	E.coli
<b>ProteinLength</b>	403-449a.a.
<b>Description</b>	<p>The protein encoded by this gene belongs to the aldehyde dehydrogenase family. Aldehyde dehydrogenase is the next enzyme after alcohol dehydrogenase in the major pathway of alcohol metabolism. There are two major aldehyde dehydrogenase isozymes in the liver, cytosolic and mitochondrial, which are encoded by distinct genes, and can be distinguished by their electrophoretic mobility, kinetic properties, and subcellular localization. This gene encodes the cytosolic isozyme. Studies in mice show that through its role in retinol metabolism, this gene may also be involved in the regulation of the metabolic responses to high-fat diet.</p>
<b>Storage</b>	The protein is stored in PBS buffer at -20°C. Avoid repeated freezing and thawing cycles.
<b>Storage Buffer</b>	1M PBS (58mM Na <sub>2</sub> HPO <sub>4</sub> , 17mM NaH <sub>2</sub> PO <sub>4</sub> , 68mM NaCl, pH8. ) added with 100mM GSH and 1% Triton X-100, 15% glycerol.

### GENE INFORMATION

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<b>Gene Name</b>	ALDH1A1 aldehyde dehydrogenase 1 family, member A1 [ Homo sapiens ]
<b>Official Symbol</b>	ALDH1A1
<b>Synonyms</b>	ALDH1A1; aldehyde dehydrogenase 1 family, member A1; ALDH1, PUMB1; retinal dehydrogenase 1; RALDH1; retinaldehyde dehydrogenase 1; ALHDII; RALDH 1; ALDH class 1; acetaldehyde dehydrogenase 1; aldehyde dehydrogenase 1, soluble; aldehyde dehydrogenase, liver cytosolic; ALDC; ALDH1; PUMB1; ALDH11; ALDH-E1; MGC2318;
<b>Gene ID</b>	216
<b>mRNA Refseq</b>	NM_000689
<b>Protein Refseq</b>	NP_000680
<b>MIM</b>	100640
<b>UniProt ID</b>	P00352
<b>Chromosome Location</b>	9q21.13
<b>Pathway</b>	Biological oxidations, organism-specific biosystem; Ethanol oxidation, organism-specific biosystem; Fatty Acid Omega Oxidation, organism-specific biosystem; Metabolic pathways, organism-specific biosystem; Metabolism, organism-specific biosystem; Phase 1 - Functionalization of compounds, organism-specific biosystem; Retinol metabolism, organism-specific biosystem;
<b>Function</b>	Ras GTPase activator activity; aldehyde dehydrogenase (NAD) activity; androgen binding; oxidoreductase activity; retinal dehydrogenase activity;

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