



# Anti-ALDH2 polyclonal antibody (DPABY-709)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

<b>Antigen Description</b>	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]
<b>Immunogen</b>	Recombinant fragment corresponding to a region within amino acids 151 and 517 of ALDH2 (Uniprot ID#P05091)
<b>Isotype</b>	IgG
<b>Source/Host</b>	Rabbit
<b>Species Reactivity</b>	Human
<b>Purification</b>	Purified by antigen-affinity chromatography.
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	ELISA Pr*, ICC/IF, IHC-P, WB
<b>Molecular Weight</b>	56 kDa
<b>Cellular Localization</b>	Mitochondrion matrix
<b>Positive Control</b>	H1299, GL261, C8D30, BCL-1, Raw264.7
<b>Format</b>	Liquid

<b>Concentration</b>	0.23 mg/ml
<b>Size</b>	25 µl
<b>Buffer</b>	0.1M Tris, 0.1M Glycine, 10% Glycerol (pH7). 0.01% Thimerosal was added as a preservative.
<b>Preservative</b>	None
<b>Storage</b>	Keep as concentrated solution. Aliquot and store at -20°C or below. Avoid multiple freeze-thaw cycles.

## GENE INFORMATION

<b>Gene Name</b>	<a href="#">ALDH2 aldehyde dehydrogenase 2 family (mitochondrial) [ Homo sapiens (human) ]</a>
<b>Official Symbol</b>	ALDH2
<b>Synonyms</b>	ALDH2; aldehyde dehydrogenase 2 family (mitochondrial); ALDM; ALDH1; ALDH-E2; aldehyde dehydrogenase, mitochondrial; ALDH class 2; liver mitochondrial ALDH; acetaldehyde dehydrogenase 2; nucleus-encoded mitochondrial aldehyde dehydrogenase 2;
<b>Entrez Gene ID</b>	<a href="#">217</a>
<b>Protein Refseq</b>	<a href="#">NP_000681</a>
<b>UniProt ID</b>	<a href="#">P05091</a>
<b>Chromosome Location</b>	12q24.2
<b>Pathway</b>	Arginine and proline metabolism; Ascorbate and aldarate metabolism; Biological oxidations; Ethanol oxidation; Fatty Acid Omega Oxidation; Fatty acid degradation; GABA biosynthesis, eukaryotes, putrescine => GABA; Glycerolipid metabolism;
<b>Function</b>	aldehyde dehydrogenase (NAD) activity; aldehyde dehydrogenase [NAD(P)+] activity; electron carrier activity;