



ALDH3A1 peptide (DAG-P0152)

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

PRODUCT INFORMATION

Antigen Description	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, Sep 2008]
Specificity	High levels in stomach, esophagus and lung; low level in the liver and kidney.
Purity	70 - 90% by HPLC.
Conjugate	Unconjugated
Sequence Similarities	Belongs to the aldehyde dehydrogenase family.
Format	Liquid
Preservative	None
Storage	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles. Information available upon request.

GENE INFORMATION

Gene Name	ALDH3A1 aldehyde dehydrogenase 3 family, member A1 [Homo sapiens (human)]
Official Symbol	ALDH3A1

Synonyms	ALDH3A1; aldehyde dehydrogenase 3 family, member A1; ALDH3; ALDHIII; aldehyde dehydrogenase, dimeric NADP-preferring; stomach aldehyde dehydrogenase; aldehyde dehydrogenase type III; aldehyde dehydrogenase isozyme 3;
Entrez Gene ID	218
mRNA Refseq	NM_000691.4
Protein Refseq	NP_000682.3
UniProt ID	P30838
Chromosome Location	17p11.2
Pathway	AhR pathway, organism-specific biosystem; Chemical carcinogenesis, organism-specific biosystem; Chemical carcinogenesis, conserved biosystem; Drug metabolism - cytochrome P450, organism-specific biosystem; Drug metabolism - cytochrome P450, conserved biosystem; Glycolysis / Gluconeogenesis, organism-specific biosystem; Glycolysis / Gluconeogenesis, conserved biosystem; Histidine metabolism, organism-specific biosystem; Histidine metabolism, conserved biosystem; Metabolism of xenobiotics by cytochrome
Function	3-chloroallyl aldehyde dehydrogenase activity; alcohol dehydrogenase (NADP+) activity; aldehyde dehydrogenase (NAD) activity; aldehyde dehydrogenase [NAD(P)+] activity;