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Datasheet for ABIN7317523
ALDH7A1 Protein (His tag)

Overview

Quantity:	50 µg
Target:	ALDH7A1
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Purification tag / Conjugate:	This ALDH7A1 protein is labelled with His tag.

Product Details

Purpose:	Recombinant Human ALDH7A1/ATQ1 Protein (His Tag)
Sequence:	Ser 2-Gln 511
Characteristics:	A DNA sequence encoding the human ALDH7A1 isoform 2 (P49419-2) (Ser 2-Gln 511) was expressed, with a polyhistidine tag at the N-terminus.
Purity:	> 93 % as determined by reducing SDS-PAGE.

Target Details

Target:	ALDH7A1
Alternative Name:	ALDH7A1/ATQ1 (ALDH7A1 Products)
Background:	Background: ALDH7A1 (Aldehyde dehydrogenase 7 family, member A1) is a member of subfamily 7 in the aldehyde dehydrogenase family. These enzymes are thought to play a major role in the detoxification of aldehydes generated by alcohol metabolism and lipid peroxidation. Mammalian ALDH7A1 is homologous to plant ALDH7B1 which protects against various forms

Target Details

of stress such as increased salinity, dehydration and treatment with oxidants or pesticides. In mammals, ALDH7A1 is known to play a primary role during lysine catabolism through the NAD⁺-dependent oxidative conversion of amino adipate semialdehyde (AASA) to its corresponding carboxylic acid, α -amino adipic acid. Deleterious mutations in human ALDH7A1 are responsible for pyridoxine-dependent and folinic acid-responsive seizures. ALDH7A1 is a novel aldehyde dehydrogenase expressed in multiple subcellular compartments that protects against hyperosmotic stress by generating osmolytes and metabolizing toxic aldehydes.

Synonym: ATQ1;EPD;PDE

Molecular Weight: 56 kDa

Pathways: [Sensory Perception of Sound](#)

Application Details

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: Please refer to the printed manual for detailed information.

Buffer: Lyophilized from sterile 50 mM Tris, 500 mM NaCl, 20 % glycerol, pH 8.0

Storage: 4 °C,-20 °C,-80 °C

Storage Comment: Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.