Datasheet for ABIN7194201

ALDH4A1 Protein (GST tag,His tag)

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Overview

Quantity:	100 µg
Target:	ALDH4A1
Origin:	Human
Source:	Baculovirus infected Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This ALDH4A1 protein is labelled with GST tag,His tag.

Product Details

Purpose:	Recombinant Human ALDH4A1 Protein (His & GST Tag)
Sequence:	Lys 25-Gln 563
Characteristics:	A DNA sequence encoding the mature form of human ALDH4A1 (AAH07581.1) (Lys 25-Gln 563) was fused with the N-terminal polyhistidine-tagged GST tag at the N-terminus.
Purity:	> 80 % as determined by reducing SDS-PAGE.
Endotoxin Level:	< 1.0 EU per µg as determined by the LAL method.

Target Details

Target:	ALDH4A1
Alternative Name:	ALDH4A1 (ALDH4A1 Products)
Background:	Background: ALDH4A1 is a member of the aldehyde dehydrogenase family. Aldehyde dehydrogenase enzymes function in the metabolism of many molecules including certain fats (cholesterol and other fatty acids) and protein building blocks (amino acids). Additional

Target Details

	aldehyde dehydrogenase enzymes detoxify external substances, such as alcohol and pollutants, and internal substances, such as toxins that are formed within cells. ALDH4A1 is expressed abundantly in liver followed by skeletal muscle, kidney, heart, brain, placenta, lung and pancreas. It is a mitochondrial matrix NAD-dependent dehydrogenase which catalyzes the second step of the proline degradation pathway, converting pyrroline-5-carboxylate to glutamate. Defects in ALDH4A1 are the cause of hyperprolinemia type 2 (HP-2). HP-2 is characterized by the accumulation of delta-1-pyrroline-5-carboxylate (P5C) and proline. The disorder may be causally related to neurologic manifestations, including seizures and mental retardation. Synonym: ALDH4,P5CD,P5CDh
Molecular Weight:	86.8 kDa
Pathways:	Monocarboxylic Acid Catabolic Process

Application Details

Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Please refer to the printed manual for detailed information.
Buffer:	Lyophilized from sterile 20 mM Tris, 500 mM NaCl, pH 8.5, 10 % glycerol
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.