Recombinant Human ALDH1A1/ALDC Protein (His Tag)

Catalog Number: PKSH032052

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description	
Species	Human
Source	E.coli-derived Human ALDH1A1; ALDC protein Met 1-Ser501, with an N-terminal His
Calculated MW	57.0 kDa
Observed MW	60 kDa
Accession	P00352
Bio-activity	Not validated for activity
Properties	
Purity	>95% as determined by reducing SDS-PAGE.
Concentration	Subject to label value.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Store at $<$ -20°C, stable for 6 months. Please minimize freeze-thaw cycles.
Shipping	This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel
	packs. Upon receipt, store it immediately at $< -20^{\circ}$ C.
Formulation	Supplied as a 0.2 µm filtered solution of 20mM Tris-HCl, 150mM NaCl, 20% Glycerol,
	1mM DTT, pH 8.0.
Data	
kDa	MK
120 90 60 40	

El

30 20

14

> 95 % as determined by reducing SDS-PAGE.

Background

Aldehyde Dehydrogenase Family 1 Member A1 (ALDH1A1) is a cytoplasmic enzyme that belongs to the Aldehyde Dehydrogenase family. ALDH1A1 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. ALDH1A1 is the main cytosolic isoform, which has a lower affinity for aldehydes than the mitochondrial enzyme. ALDH1A1 binds free retinal and cellular retinol-binding protein-bound retinal. It can convert/oxidize retinaldehyde to retinoic acid.