www.neobiolab.com
info@neobiolab.com
888.754.5670, +1 617.500.7103 United States
0800.088.5164, +44 020.8123.1558 United Kingdom

ALDH2 Human

Catalog #:ENPS-408

For research use only.

Description:ALDH2 Human Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 501 amino acids (18-517 a.a.) & having a molecular mass of 54.5 kDa. The ALDH2 is purified by proprietary chromatographic techniques.

Synonyms:ALDM, ALDHI, ALDH-E2, MGC1806, ALDH2, Aldehyde dehydrogenase mitochondrial, ALDH class 2.

Source: Escherichia Coli.

Physical Appearance: Sterile Filtered clear solution.

Amino Acid Sequence:MSAAATQAVP APNQQPEVFC NQIFINNEWH DAVSRKTFPT VNPSTGEVIC QVAEGDKEDV DKAVKAARAA FQLGSPWRRM DASHRGRLLNRLADLIERDR TYLAALETLD NGKPYVISYL VDLDMVLKCL RYYAGWADKY HGKTIPIDGD FFSYTRHEPV GVCGQIIPWN FPLLMQAWKL GPALATGNVV VMKVAEQTPL TALYVANLIK EAGFPPGVVN IVPGFGPTAG AAI

Purity: Greater than 90.0% as determined by SDS-PAGE.

Formulation:
ALDH2 protein contains 20mM Tris-HClbuffer, pH-7.5, 1mM DTT, 1mM EDTA and 10% Glycerol.

Stability:
Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).Please prevent freeze-thaw cycles.

Usage:
NeoBiolab's products are furnished for LABORATORY RESEARCH USE ONLY. The product may not be used as drμgs, agricultural or pesticidal products, food additives or household chemicals.

Introduction:
ALDH2 is part of the aldehyde dehydrogenase family of proteins which catalyze the chemical transformation from acetaldehyde to acetic acid. ALDH2 is the second enzyme of the major oxidative pathway of alcohol metabolism. ALDH2 has 2 major liver isoforms: cytosolic and mitochondrial, which differ by their electrophoretic mobilities, kinetic properties, and subcellular localizations. Nearly all Caucasians have 2 major isozymes, whereas roμghly 50% of Orientals have only the cytosolic isozyme, omitting the mitochondrial isozyme. The extremely higher rate of acute alcohol intoxication with Orientals compared to Caucasians is due to the fact of the absence of mitochondrial isozyme. ALDH2 has a low Km for acetaldehydes, and is localized in mitochondrial matrix.

Biological Activity:
Specific activity was found to be > 0.14 units/ml. Activity was obtained by measuring the increase of NADP in absorbance at 340 nm resulting from the reduction of NAD. 1 unit will oxidize 1umole of acetaldehyde to acetic acid per minute at pH 8 at 25C in the presence of beta-NAD, potassium and thiols.

To place an order, please Click HERE.