CREATIVE BIOMART®
Assay Kit

ALDH Activity Colorimetric Assay Kit

Product Information

Cat.No. Kit-0074

Product Overview

ALDH Activity Assay Kit (Colorimetric) is a quantitative colormetric determination of ALDH activity at 450 nm.

Description

The NAD-dependent Aldehyde Dehydrogenase (ALDH) plays a vital role in cellular detoxification. It oxidizes various aldehydes and generates the corresponding carboxyolic acid. ALDH have been found in every cellular compartment. Based on its structure and function, ALDH comprises 3 major classes in mammals: Class 1 and Class 3 (the tumor form) are located in the cytosol and include both constitutive and induced forms; Class 2 is located in the mitochondria and only exists as the constitutive form. In humans, the ALDH superfamily consists of 19 genes. The mutation of ALDH genes (loss of function) causes human diseases such as Type II hyperprolinemia, pyridoxine-dependent seizure and hyperammonemia. Recent studies show that increased ALDH activity leads to several types of malignancies, serves as a cancer stem cell marker and correlates with poor prognosis. Therefore the early detection of ALDH activity levels can be prognostic and guide the therapeutic strategies. The ALDH Activity Assay Kit (Colorimetric) is a simple, fast and reliable method to quantify the ALDH enzymatic activity. In this assay, acetaldehyde is oxidized by ALDH generating NADH which then reduces a colorless probe to a colored product with strong absorbance at 450 nm. The assay can detect< 0.5 mU of ALDH activity (based on our unit definition) in a variety of samples.

Target Species

Mammals

Usage

For research use only (RUO)

Storage

Store kit at -20°C, protect from light. Let ALDH Assay Buffer warm to room temperature before use. Briefly centrifuge all small vials prior to opening.

Tel: 1-631-559-9269 1-516-512-3133
Email:info@creative-biomart.org
Fax:1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

CREATIVE BIOMART®
Assay Kit

ALDH Activity Colorimetric Assay Kit

Kit Components

ALDH Assay Buffer. Cap code: WM. 25 mlAcetaldehyde. Cap code: purple. 0.5 mlALDH Substrate Mix (Lyophilized). Cap code: red. 1 vialALDH Positive Control (Lyophilized). Cap code: green. 1 vialNADH Standard (0.5 µmol, Lyophilized). Cap code: yellow. 1 vial

Detection method Colorimetric

Compatible Sample Types

Biological Fluid, Cell Lysate, Cell Culture Supernatant, Plasma, Serum, Tissue Culture Supernatant

Tel: 1-631-559-9269 1-516-512-3133

Email:info@creative-biomart.org

Fax:1-631-938-8127

45-1 Ramsey Road, Shirley, NY 11967, USA