

5'-Nucleotidase (CD73)Activity Assay Kit (Colorimetric)

Cat. No. Kit-1034 Lot. No. (See product label)

SPECIFICATION

Product Overview

Description

5'-Nucleotidase (5'-NT), also known as CD73 (EC 3.1.3.5) is an enzyme located in the plasma membrane. It converts extracellular nucleotides like 5'-AMP to their corresponding nucleosides, through phosphorylitic cleavage. This conversion facilitates uptake of the nucleosides through nucleoside receptors into the cell, where they can again be phosphorylated to generate nucleotides and contribute to the nucleotide pool, inside the cell. 5'-NT levels are elevated in hepatic diseases such as viral hepatitis, alcoholic liver disease and cirrhosis. 5'-Nucleotidase Activity Kit is a simple two-step end point assay that relies on the Berthelot's test for quantification of ammonia. In this assay, the action of 5'-nucleotidase on the substrate generates a product, which releases ammonia in presence of the converter. Developer I and II are then used to quantify the released ammonia through increase in absorbance at 670 nm. This assay can detect as low as 0.2 mU of 5'-NT. Since non-specific enzymes like alkaline phosphatase can give a positive signal in this assay, 5'-NT inhibitor may be used to completely inhibit 5'-nucleotidase and distinguish from the signal from non-specific enzymes. The assay kit also includes 5'- Nucleotidase (5'-NT) enzyme for use as positive control.

Applications

Measurement of 5'-Nucleotidase activity in various tissues/cells

Storage

-20°C

Shipping

Gel Pack

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

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

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

Size	100 assays
Kit Components	5-NT Assay Buffer; 5-NT Substrate; 5-NT Convertor; 5-NT Inhibitor; 5-NT Stop Solution; 5-NT Developer I; 5-NT Developer II; NH ₄ ⁺ Standard (100 mM); 5-NT Positive Control
Target Species	Mammalian
Detection method	Colorimetric (OD 670 nm)
Features & Benefits	Simple, highly sensitive, high-throughput compatible

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