

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

Product Information

Cat

Kit-1034

Common Name

CD73

Cat.No.

Kit-1034

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

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

Shipping

Gel Pack

Size

100 assays

Kit Components

5-NT Assay Buffer; 5-NT Substrate; 5-NT Converter; 5-NT Inhibitor; 5-NT Stop Solution; 5-NT Developer I; 5-NT Developer II; NH₄⁺ Standard (100 mM); 5-NT Positive Control

Target Species

Mammalian

Detection method Colorimetric (OD 670 nm)

Features & Benefits

Simple, highly sensitive, high-throughput compatible