

Neprilysin Activity Assay Kit (Fluorometric)

Product Information

Cat

Kit-1049

Common Name

Neprilysin

Cat.No.

Kit-1049

Description

Neprilysin (NEP, EC 3.4.24.11), also known as neutral endopeptidase, enkephalinase, CD10, and common acute lymphoblastic leukemia antigen, is a zinc-containing transmembrane metalloproteinase. It is able to hydrolyze very important endogenous peptides, such as natriuretic atrial factor, enkephalins, substance P, bradykinin and amyloid β (A β) peptide. Thus, NEP is a potentially therapeutic target in important pathological conditions such as cardiovascular disease, prostate cancer, and Alzheimer's disease. NEP has also been used as a biological marker of a type of child leukemia and the detection of NEP in endometrial stromal cells had been proposed as a helpful tool in diagnosis of endometriosis. NEP is currently a focus of major interest in cardiovascular and neurological research. Neprilysin Activity Kit utilizes the ability of an active NEP to cleave a synthetic substrate (Abz-based peptide) to release a free fluorophore. The released Abz can be easily quantified using a fluorescence microplate reader. The substrate is specific to NEP and can differentiate the NEP activity from Trypsin and other structurally similar zinc metalloproteinase in biological samples such as Angiotensin-Converting Enzymes (ACE1, ACE2), Endothelin Converting Enzymes (ECE1, ECE2). Our assay kit is simple, specific and can detect as low as 20 μ U/mg of NEP activity.

Applications

NEP Activity Assay is highly sensitive with a detection limit of approximately 20 μ U/mg

Storage

-20°C

Neprilysin Activity Assay Kit (Fluorometric)

Shipping

Gel Pack

Size

100 assays

Kit Components

NEP Assay Buffer; Neprilysin (Lyophilized); NEP Substrate (in DMSO); Abz-Standard (1 mM)

Target Species

Eukaryotes

Detection method Fluorometric (Ex/Em = 330/430 nm)

Features & Benefits

Simple and reliable test NEP activity in biological samples;

High-throughput compatible;

Includes NEP positive control