

Angiotensin II Converting Enzyme (ACE2) Inhibitor Screening Kit

Product Information

Cat

Kit-2409

Cat.No.

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Product Overview

Angiotensin II converting enzyme (ACE2, EC 3.4.17.23), a carboxypeptidase, is part of the renin-angiotensin system (RAS) that controls regulation of blood pressure by cleaving the C-terminal dipeptide of Angiotensin II to convert it into Angiotensin 1-7. It also cleaves Angiotensin I to produce Ang 1-9, of unknown function. ACE2 is a receptor of human coronaviruses, such as SARS and HCoV-NL63. It is expressed on the vascular endothelial cells of heart and kidney. The inhibitors of ACE2 could be able to regulate hypertension by changing vascular permeability. Screening for small molecule and peptide inhibitors might also help in finding treatment for coronavirus mediated infection. ACE2 Inhibitor Screening Kit can be used to screen for potent inhibitors of ACE2 activity, it utilizes the ability of an active ACE2 to cleave a synthetic MCA based peptide substrate to release a free fluorophore. The released MCA can be easily quantified using a fluorescence microplate reader. In the presence of an ACE2 specific inhibitor, the enzyme loses its peptidase activity which results in decrease of fluorescence intensity. This assay kit is simple and can be used to identify and characterize ACE2 inhibitors in a high-throughput format.

Applications

Screening/characterizing/studying ACE2 inhibitors/activators

Storage

-20°C

Shipping

Gel Pack

Size

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100 assays

Kit Components

ACE2 Assay Buffer; ACE2 Dilution Buffer; ACE2 Enzyme; ACE2 Substrate; ACE2 Inhibitor (0.5 mM)

Detection method Fluorescence (Ex/Em = 320/420 nm)

Features & Benefits

Simple and reliable test to screen ACE2 inhibitors/activators; High-throughput compatible; Includes Inhibitor Control
