

# Angiotensin II Converting Enzyme (ACE2) Inhibitor Screening Kit

**Cat. No.** Kit-2409    **Lot. No.** (See product label)

## SPECIFICATION

### 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.

|                     |                                                              |
|---------------------|--------------------------------------------------------------|
| <b>Applications</b> | Screening/characterizing/studying ACE2 inhibitors/activators |
|---------------------|--------------------------------------------------------------|

|                |       |
|----------------|-------|
| <b>Storage</b> | -20°C |
|----------------|-------|

|                 |          |
|-----------------|----------|
| <b>Shipping</b> | Gel Pack |
|-----------------|----------|

|             |            |
|-------------|------------|
| <b>Size</b> | 100 assays |
|-------------|------------|

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|                                |                                                                                                                       |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| <b>Kit Components</b>          | ACE2 Assay Buffer; ACE2 Dilution Buffer; ACE2 Enzyme; ACE2 Substrate; ACE2 Inhibitor (0.5 mM)                         |
| <b>Detection method</b>        | Fluorescence (Ex/Em = 320/420 nm)                                                                                     |
| <b>Features &amp; Benefits</b> | Simple and reliable test to screen ACE2 inhibitors/activators; High-throughput compatible; Includes Inhibitor Control |

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