



CAPN1 Inhibitor (Human) Screening Kit

Product Information

Cat.No.

Kit-0151

Product Overview

CAPN1 Inhibitor (Human) Screening Kit is used for screening human CAPN1 inhibitor.

Description

Calpain 1 is calcium-dependent, non-lysosomal cysteine protease with low calcium requirement. It is expressed ubiquitously and in the brain, mainly localized to the cell body and dendrites of neurons and to a lesser extent in axons and glial cells. Hyperactivation of calpains is implicated in a number of pathologies associated with altered calcium homeostasis such as Alzheimer's disease as well as secondary degeneration resulting from acute cellular stress following cerebral (neuronal) ischemia, traumatic brain injury and spinal cord injury. CAPN1 Inhibitor (Human) Screening Kit is based on the detection of cleavage of calpain substrate Ac-LLY-AFC. Ac-LLY-AFC possess very weak fluorescence; upon cleavage of the substrate by calpain 1, free AFC can be quantified fluorometrically (Ex/Em = 400/505 nm). In the presence of potent Calpain 1 inhibitor, the hydrolyzation of substrate will be impeded. The kit provides a rapid, simple, sensitive, and reliable test suitable for high throughput screening of Calpain 1 inhibitors. Inhibitor control (Calpain inhibitor 1, ALLN) is included to compare the efficacy of test inhibitors.

Applications

Screening human Calpain 1 inhibitors

Target Species

Human

Usage

For research use only (RUO)

Storage

Store kit at -80°C, protected from light. Warm Assay Buffer to room temperature before use. Briefly



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Assay Kit

CAPN1 Inhibitor (Human) Screening Kit

centrifuge all small vials before opening. Read the entire protocol before performing the assay.

Kit Components

Assay Buffer. Cap code: WM. 25 ml Substrate. Cap code: red. 0.2 ml Calpain 1 Enzyme. Cap code: green. 0.2 ml Inhibitor Control (Calpain Inhibitor 1, ALLN) [1 μ M]. Cap code: blue. 0.5 ml

Detection method Fluorometric

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