CREATIVE BIOMART®
Assay Kit

ELANE Inhibitor Screening Kit

Product Information

Cat.No. Kit-0321

Product Overview

ELANE Inhibitor Screening Kit is used for screening neutrophil elastase inhibitor.

Description

Neutrophil Elastase (NE) is an aggressive and cytotoxic 29 kDa serine protease stored mainly in the azurophil granules of neutrophil granulocytes. It plays a role in the degradation of a wide range of extracellular matrix proteins, including fibronectin, laminin, proteoglycans, collagens, and elastin. When the extracellular NE concentration exceeds the buffering capacity of endogenous inhibitors, it becomes implicated in the signs, symptoms and disease progression of inflammatory lung disorders via its role in the inflammatory process, mucus overproduction and lung tissue damage. In ELANE Inhibitor Screening Kit, NE hydrolyzes a specific fluorescent substrate to release the fluorescent group, which can be detected at Ex/Em = 400/505 nm. In presence of a potent Neutrophil Elastase inhibitor, the hydrolyzation of substrate will be inhibited or stopped. The kit provides a rapid, simple, sensitive, and reliable test suitable as a high throughput screening assay of Neutrophil Elastase inhibitors. For comparison of the relative efficacy of test inhibitors, a control inhibitor, SPCK (Ki = 10 μM for human leukocyte elastase) is included.

Usage

For research use only (RUO)

Storage

Store the kit at -20°C, protected from light. Allow Assay Buffer to warm to room temperature before use. Briefly centrifuge vials before opening. Read the entire protocol before performing the assay.

Kit Components

Assay Buffer. Cap color: WM. 25 mlSubstrate. Cap color: red. 0.2 mlNeutrophil Elastase. Cap color: green. 1 vialInhibitor Control (3 mM, SPCK). Cap color: purple. 100 µl

Detection method Fluorometric

Tel: 1-631-559-9269 1-516-512-3133
Email:info@creative-biomart.org
Fax:1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA