

Neutrophil Elastase Inhibitor Screening Kit (Fluorometric)

Product Information

Cat

Kit-2367

Cat.No.

Kit-2367

Product Overview

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 Neutrophil Elastase 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 ($K_i = 10 \mu\text{M}$ for human leukocyte elastase) is included.

Applications

This kit can be used for screening NE inhibitors and comes along with positive and negative control inhibitors

Storage

-20°C

Shipping

Gel Pack

Size

Neutrophil Elastase Inhibitor Screening Kit (Fluorometric)

100 assays

Kit Components

Assay Buffer; Substrate; Neutrophil Elastase; Inhibitor Control (3 mM, SPCK)

Detection method Fluorescence (Ex/Em 400/505 nm)

Features & Benefits

Simple procedure; takes ~ less than 40 minutes; Fast and convenient
