

Neutrophil Elastase Activity Assay kit (Fluorometric)

Product Information

Cat

Kit-1100

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Description

Neutrophil Elastase (NE, EC 3.4.21.37, leukocyte elastase, elastase 2, or serine elastase) is a cytotoxic serine protease. It is stored in the azurophil granules of neutrophil granulocyte and is released following cell stimulation, e.g. by pathogens, immune complexes or chemotactic agents (PMA). When the extracellular NE concentration exceeds the buffering capacity of endogenous inhibitors, it causes degradation of a wide range of extracellular matrix proteins, including fibronectin, laminin, proteoglycans, collagens, and elastin. Extracellular elastase is implicated in the signs, symptoms and disease progression of inflammatory lung disorders (such as cystic fibrosis, COPD, lung emphysema) via its role in the inflammatory processes, mucus overproduction and lung tissue damage. Neutrophil Elastase Activity Assay Kit utilizes the ability of NE to proteolytically cleave a synthetic substrate and release a fluorophore, AFC, which can be easily quantified by fluorescence microplate readers. This assay kit is simple, rapid and can detect as low as 1 ng of Neutrophil Elastase in a variety of samples.

Applications

Determine activity of purified Neutrophil Elastase
Detect the activity of Neutrophil Elastase in plasma, blood

Screen/study/characterize chemotactic agents causing Neutrophil stimulation and release of Elastase

Storage

-20°C

Shipping

Gel Pack

Neutrophil Elastase Activity Assay kit (Fluorometric)

Size

100 assays

Kit Components

NE Assay Buffer; NE Dilution Buffer; NE Substrate; NE Enzyme Standard (1 μ g)

Detection method Fluorescence (Ex/Em = 380/500 nm)

Features & Benefits

Simple & convenient protocol.

Can detect neutrophil elastase activity as low as 1 ng in a variety of samples.

Kit contains all necessary reagents for measuring neutrophil elastase activity.