

ELANE Inhibitor Screening Kit

Cat. No. Kit-0321 **Lot. No.** (See product label)

SPECIFICATION

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 ($K_i = 10 \mu\text{M}$ 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

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Elastase. Cap color: green. 1 vial Inhibitor Control (3 mM, SPCK). Cap color: purple.
100 μ

Detection method	Fluorometric
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