

Rat neutrophil elastase, NE ELISA Kit | NE elisa kit

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CATALOG #
AAA80546

REACTIVITY
Rat

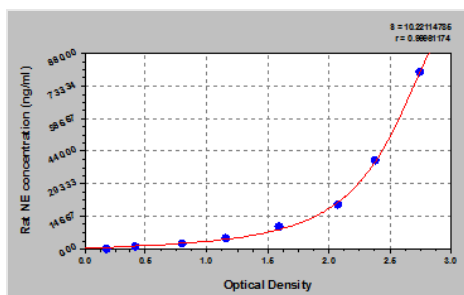
PRODUCT SYNONYMS

neutrophil elastase; NE; Rat neutrophil elastase; NE ELISA Kit; NE elisa kit

PRODUCT SPECIFICATIONS

Reactivity	Rat
Sequence Length	267
Samples	Serum, plasma, cell culture supernates, tissue homogenates, Cell lysates
Detection Range	12.5 ng/ml-800 ng/ml
Sensitivity	3.12 ng/ml
Detection Wavelength	450 nm
Sample Volume	50-100ul
Preparation and Storage	Unopened test kits should be stored at 2 to 8 degree C upon receipt. Please refer to pdf manual for further storage instructions.

IMAGES



Standard Curve (Sample)

ADDITIONAL INFORMATION

Related Product Information for NE elisa kit

Introduction: Neutrophil elastase is a serine protease in the same family as chymotrypsin and has broad substrate specificity. Secreted by neutrophils during inflammation, it destroys bacteria and host tissue. As with other serine proteases it contains a charge relay system composed of the catalytic triad of histidine, aspartate, and serine residues that are dispersed throughout the primary sequence of the polypeptide but that are brought together in the three dimension conformation of the folded protein. The gene encoding neutrophil elastase consists of five exons. It is one of the two forms of elastase. The neutrophil form of elastase is 218 amino acids long, with two asparagine-linked carbohydrate side chains and four intramolecular disulfide bridges. It is present in azurophil granules in the neutrophil cytoplasm. There appear to be two forms of neutrophil elastase, termed IIa and IIb. Neutrophil elastase is an important protease enzyme that when expressed aberrantly can cause emphysema or emphysematous changes. This involves breakdown of the lung structure and increased airspaces. Mutations of the NE gene cause severe congenital neutropenia, which is a failure of neutrophils to mature.

Principle of the Assay: The microtiter plate provided in this kit has been pre-coated with an antibody specific to NE. Standards or samples are then added to the appropriate microtiter plate wells with a biotin-conjugated antibody preparation specific for NE and Avidin conjugated to Horseradish Peroxidase (HRP) is added to each microplate well and incubated. Then a TMB (3,3',5,5' tetramethyl-benzidine) substrate solution is added to each well. Only those wells that contain NE, biotin-conjugated antibody and enzyme-conjugated Avidin will exhibit a change in color. The enzyme-substrate reaction is terminated by the addition of a sulphuric acid solution and the color change is measured spectrophotometrically at a wavelength of 450 nm +/- 2 nm. The concentration of NE in the samples is then determined by comparing the O.D. of the samples to the standard curve.

NCBI AND UNIPROT INFORMATION

NCBI GI #	4503549
NCBI GeneID	1991
NCBI Accession #	NP_001963.1
NCBI GenBank Nucleotide #	NM_001972.2
UniProt Accession #	P08246; P09649; Q6B0D9; Q6LDP5
Molecular Weight	28,518 Da
NCBI Official Full Name	neutrophil elastase preproprotein
NCBI Official Synonym Full Names	elastase, neutrophil expressed
NCBI Official Symbol	ELANE
NCBI Official Synonym Symbols	GE; NE; HLE; HNE; ELA2; SCN1; PMN-E
NCBI Protein Information	neutrophil elastase; elastase-2; medullasin; PMN elastase; leukocyte elastase; elastase 2, neutrophil; human leukocyte elastase; polymorphonuclear elastase; bone marrow serine protease; granulocyte-derived elastase
UniProt Protein Name	Neutrophil elastase
UniProt Gene Name	ELANE
UniProt Synonym Gene Names	ELA2; HLE
UniProt Entry Name	ELNE_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://www.aaabiotech.com/rat-elisa-kits/neutrophil-elastase-ne/80546>