

Human elastase 2, neutrophil (ELA2) ELISA Kit | ELA2 elisa kit

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CATALOG #
AAA79861

REACTIVITY
Human

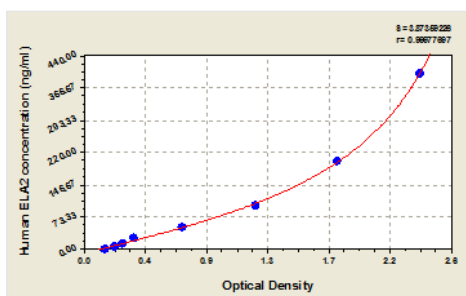
PRODUCT SYNONYMS

elastase 2; neutrophil (ELA2); Human elastase 2; neutrophil; ELA2 ELISA Kit; neutrophil (ELA2) ELISA kit; ELA2; GE; HLE; HNE; NE; PMN-E; SCN1; bone marrow serine protease; granulocyte-derived elastase; leukocyte elastase; medullasin; neutrophil elastase; polymorphonuclear elastase; ELA2 elisa kit

PRODUCT SPECIFICATIONS

Reactivity	Human
Specificity	This assay has high sensitivity and excellent specificity for detection of Human ELA2. No significant cross-reactivity or interference between Human ELA2 and analogues was observed.
Sequence Length	267
Samples	Serum, plasma, tissue homogenates
Detection Range	6.25 ng/ml-400 ng/ml
Sensitivity	1.56 ng/ml
Intra-assay Precision	Intra-assay Precision (Precision within an assay): CV% is less than 8% Three samples of known concentration were tested twenty times on one plate to assess. Inter-assay Precision (Precision between assays): CV% is less than 10% Three samples of known concentration were tested in twenty assays to assess.
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 ELA2 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 human 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.

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Online datasheet: <https://stage.aaabiotech.com/human-elisa-kits/elastase-2-neutrophil-ela2/79861>