

ARG82775 Human Neutrophil Elastase ELISA Kit

Package: 96 wells
Store at: 4°C

Component

Cat. No.	Component Name	Package	Temp
ARG82775-001	Antibody-coated microplate	8 X 12 strips	4°C. Unused strips should be sealed tightly in the air-tight pouch.
ARG82775-002	Standard	2 X 50 ng/vial	4°C
ARG82775-003	Standard/Sample diluent	30 ml (Ready to use)	4°C
ARG82775-004	Antibody conjugate concentrate (100X)	1 vial (100 µl)	4°C
ARG82775-005	Antibody diluent buffer	12 ml (Ready to use)	4°C
ARG82775-006	HRP-Streptavidin concentrate (100X)	1 vial (100 µl)	4°C
ARG82775-007	HRP-Streptavidin diluent buffer	12 ml (Ready to use)	4°C
ARG82775-008	25X Wash buffer	20 ml	4°C
ARG82775-009	TMB substrate	10 ml (Ready to use)	4°C (Protect from light)
ARG82775-010	STOP solution	10 ml (Ready to use)	4°C
ARG82775-011	Plate sealer	4 strips	Room temperature

Summary

Product Description	ARG82775 Human Neutrophil Elastase ELISA Kit is an Enzyme Immunoassay kit for the quantification of Human Neutrophil Elastase in serum, plasma (EDTA, heparin) and cell culture supernatants.
Tested Reactivity	Hu
Tested Application	ELISA
Target Name	Neutrophil Elastase
Conjugation	HRP
Conjugation Note	Substrate: TMB and read at 450 nm.
Sensitivity	0.39 ng/ml
Sample Type	Serum, plasma (EDTA, heparin) and cell culture supernatants.
Standard Range	0.78 - 50 ng/ml
Sample Volume	100 µl
Precision	Intra-Assay CV: 4.3% Inter-Assay CV: 5.3%

Alternate Names Neutrophil elastase; HNE; EC 3.4.21.37; Medullasin; NE; ELA2; GE; Bone marrow serine protease; SCN1; PMN-E; Human leukocyte elastase; HLE; Elastase-2; PMN elastase

Application Instructions

Assay Time ~ 5 hours

Properties

Form 96 well

Storage instruction Store the kit at 2-8°C. Keep microplate wells sealed in a dry bag with desiccants. Do not expose test reagents to heat, sun or strong light during storage and usage. Please refer to the product user manual for detail temperatures of the components.

Note For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

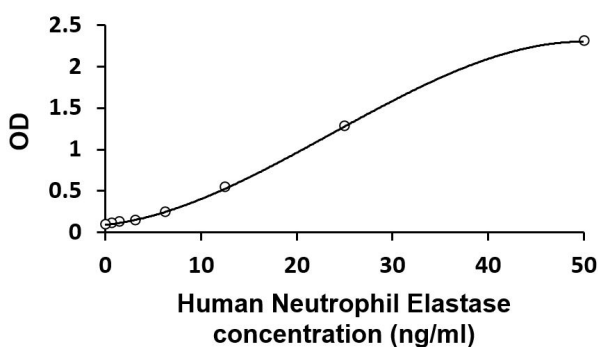
Gene Symbol ELANE

Gene Full Name elastase, neutrophil expressed

Background Elastases form a subfamily of serine proteases that hydrolyze many proteins in addition to elastin. Humans have six elastase genes which encode structurally similar proteins. The encoded preproprotein is proteolytically processed to generate the active protease. Following activation, this protease hydrolyzes proteins within specialized neutrophil lysosomes, called azurophil granules, as well as proteins of the extracellular matrix. The enzyme may play a role in degenerative and inflammatory diseases through proteolysis of collagen-IV and elastin. This protein also degrades the outer membrane protein A (OmpA) of *E. coli* as well as the virulence factors of such bacteria as *Shigella*, *Salmonella* and *Yersinia*. Mutations in this gene are associated with cyclic neutropenia and severe congenital neutropenia (SCN). This gene is present in a gene cluster on chromosome 19. [provided by RefSeq, Jan 2016]

Function Modifies the functions of natural killer cells, monocytes and granulocytes. Inhibits C5a-dependent neutrophil enzyme release and chemotaxis (PubMed:15140022). Capable of killing *E. coli* but not *S. aureus* in vitro; digests outer membrane protein A (ompA) in *E. coli* and *K. pneumoniae* (PubMed:10947984). [UniProt]

Images



ARG82775 Human Neutrophil Elastase ELISA Kit standard curve image

ARG82775 Human Neutrophil Elastase ELISA Kit results of a typical standard run with optical density reading at 450 nm.