



Human elastase 2, neutrophil (ELA2)ELISA kit

Product Code	CSB-EL007587HU
Abbreviation	ELA2
Target Name	elastase 2, neutrophil (ELA2)
Uniprot No.	P08246
Alias	ELA2, GE, HLE, HNE, NE, PMN-E, SCN1, bone marrow serine protease elastase 2, neutrophil granulocyte-derived elastase leukocyte elastase medullasin neutrophil elastase polymorphonuclear elastase
Product Type	ELISA Kit
Immunogen Species	Homo sapiens (Human)
Sample Types	serum, plasma, tissue homogenates
Detection Range	6.25 ng/mL-400 ng/mL
Sensitivity	1.56 ng/mL
Assay Time	1-5h
Sample Volume	50-100ul
Detection Wavelength	450 nm
Lead Time	3-5 working days after you place the order, and it takes another 3-5 days for delivery via DHL or FedEx.
Research Area	Signal Transduction
Gene Names	ELANE
Tag Info	quantitative
Protein Description	Sandwich

Description	This Human ELA2 ELISA Kit was designed for the quantitative measurement of Human ELA2 protein in serum, plasma, tissue homogenates. It is a Sandwich ELISA kit, its detection range is 6.25 ng/mL-400 ng/mL and the sensitivity is 1.56 ng/mL .
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Target Details	Elastases form a subfamily of serine proteases that hydrolyze many proteins in addition to elastin. Humans have six elastase genes which encode the structurally similar proteins. The product of this gene hydrolyzes proteins within specialized neutrophil lysosomes, called azurophil granules, as well as proteins of the extracellular matrix following the protein s release from activated neutrophils. The enzyme may play a role in degenerative and inflammatory diseases by its proteolysis of collagen-IV and elastin of the extracellular matrix. This protein 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 clustered with other serine protease
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gene family members, azurocidin 1 and proteinase 3 genes, at chromosome 19pter. All 3 genes are expressed coordinately and their protein products are packaged together into azurophil granules during neutrophil differentiation.

Product Precision

Intra-assay Precision (Precision within an assay): CV%<8%

Three samples of known concentration were tested twenty times on one plate to assess.

Inter-assay Precision (Precision between assays): CV%<10%

Three samples of known concentration were tested in twenty assays to assess.

Linearity

To assess the linearity of the assay, samples were spiked with high concentrations of human ELA2 in various matrices and diluted with the Sample Diluent to produce samples with values within the dynamic range of the assay.

?	Sample	Serum(n=4)
	Average %	87
1:1	Range %	82-95
	Average %	85
1:2	Range %	81-89
	Average %	95
1:4	Range %	91-99
	Average %	97
1:8	Range %	92-104

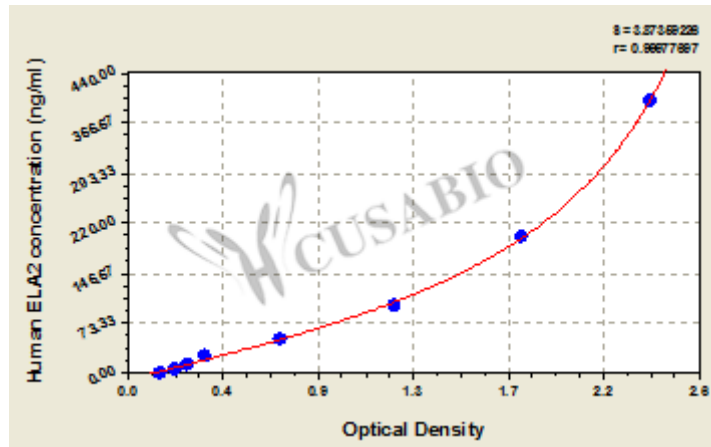
Recovery

The recovery of human ELA2 spiked to levels throughout the range of the assay in various matrices was evaluated. Samples were diluted prior to assay as directed in the Sample Preparation section.

Sample Type	Average % Recovery	Range
Serum (n=5)	108	98-110
EDTA plasma (n=4)	94	90-98

Typical

These standard curves are provided for demonstration only. A standard curve should be generated for each set of samples assayed.



ng/ml	OD1	OD2	Average	Corrected
400	2.412	2.311	2.362	2.205
200	1.836	1.735	1.786	1.629
100	1.213	1.202	1.208	1.051
50	0.704	0.693	0.699	0.542
25	0.364	0.354	0.359	0.202
12.5	0.276	0.287	0.282	0.125
6.25	0.224	0.221	0.223	0.066
0	0.156	0.157	0.157	?

Msds

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