

Human Kallistatin/Serpina4 ELISA Kit | SERPINA4 elisa kit

Human Kallistatin/Serpina4 Quick ELISA Kit

CATALOG #
AAA125876

REACTIVITY
Human

PRODUCT SYNONYMS

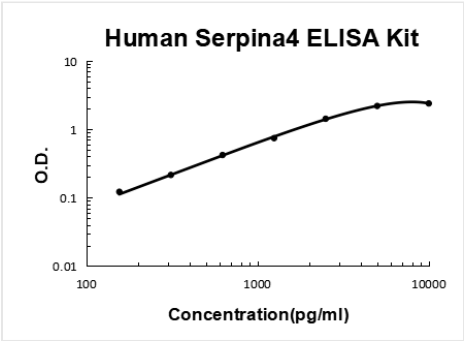
Kallistatin/Serpina4; Human Kallistatin/Serpina4 Quick ELISA Kit; Serpin A4/Kallistatin|antitrypsin); member 4; KAL; Kallistatin; KLST; KSTKallikrein inhibitor; PI-4; PI4Peptidase inhibitor 4; protease inhibitor 4 (kallistatin); serine (or cysteine) proteinase inhibitor; clade A (alpha-1 antiproteinase; Serpin A4; serpin peptidase inhibitor; antitrypsin); SERPINA4 elisa kit

PRODUCT SPECIFICATIONS

Reactivity	Human
Specificity	Natural and recombinant Human SERPINA4
Assay Type	Colorimetric sandwich
Samples	cell culture supernatants, cell lysates, serum and plasma (heparin, EDTA)
Detection Range	156pg/ml-10,000pg/ml
Sensitivity	<10pg/ml
Capture/Detection Antibodies	Capture antibody- polyclonal antibody from goat Detection antibody- polyclonal antibody from goat
Sample Data	Concentration(pg/ml) 0 156 312 625 1250 2500 5000 10000 O.D. 0.010 0.132 0.225 0.431 0.753 1.438 2.208 2.404
Intra-Assay Precision	Sample 1 2 3 n 16 16 16 Mean(pg/ml) 251 1712 4269 Standard deviation 12.05 94.16 204.91 CV(%) 4.8% 5.5% 4.8%
Inter-Assay Precision	Sample 1 2 3 n 24 24 24 Mean(pg/ml) 229 1563 4117 Standard deviation 12.37 90.65 251.14 CV(%) 5.4% 5.8% 6.1%
Reproducibility	To assay reproducibility, three samples with differing target protein concentrations were assayed using four different lots. Lots: Lot 1 (pg/ml) Lot 2 (pg/ml) Lot 3 (pg/ml) Lot 4 (pg/ml) Mean (pg/ml) Standard Deviation CV (%) Sample 1: 251 266 244 301 266 16.20 6.1% Sample 2: 1712 1764 1650 1844 1743 50.53 2.9% Sample 3: 4369 4597 4696 4723 4596 133.29 2.9% *number of samples for each test n=16.
Cross Reactivity	There is no detectable cross-reactivity with other relevant proteins.
Immunogen	Expression system for standard: NS0; Immunogen sequence: Q21-P427
Anticoagulant	heparin or EDTA
Benefits	The Quick ELISA kits, assay takes less than 1.5 hours. Detect Human Kallistatin/Serpina4 with <10pg/ml sensitivity. Format: 96-well plate with removable strips. This is a TMB colorimetric sandwich ELISA kit with short assay time and quick experiment set up.

Principle	Human SERPINA4 Pre-Coated ELISA (Enzyme-Linked Immunosorbent Assay) kit is a solid phase immunoassay specially designed to measure Human SERPINA4 in cell culture supernatants, cell lysates, serum and plasma (heparin, EDTA). It uses our proprietary Quick ELISA technology. Quick ELISA technology employs capture antibodies conjugated to an affinity tag that is recognized by the polyclonal antibody used to coat our Quick ELISA plates. This approach to sandwich ELISA allows the formation of the antibody-analyte sandwich complex in a single step, significantly reducing assay time. The kit contains recombinant Human SERPINA4 with immunogen: Expression system for standard: NS0; Immunogen sequence: Q21-P427. To measure Human SERPINA4, add standards and samples to the wells, then add antibody cocktail. Wash the wells with PBS or TBS buffer, and add TMB. TMB is substrate to HRP and will be catalyzed to produce a blue color product, which changes into yellow after adding acidic stop solution. The density of the yellow product is linearly proportional to Human SERPINA4 in the sample. Read the density of the yellow product in each well using a plate reader, and benchmark the sample wells' readings against the standard curve to determine the concentration of Human SERPINA4 in the sample.
Assay Procedure Step 1	10000pg/ml, 5000pg/ml, 2500pg/ml, 1250pg/ml, 625pg/ml, 312.5pg/ml, 156.25pg/ml
TMB Incubation Time	15
Preparation and Storage	Store at 4 degree C for 6 months, at -20 degree C for 12 months. Avoid multiple freeze-thaw cycles. (Shipped with wet ice.)

IMAGES



Application Data

ADDITIONAL INFORMATION

Related Product Information for SERPINA4 elisa kit	Serpin peptidase inhibitor, clade A(alpha-1 antiproteinase, antitrypsin), member 4, also called Kallistatin, is a protein that in humans is encoded by the SERPINA4 gene. This gene is mapped to chromosome 14q32. 13. Kallistatin is a serine proteinase inhibitor(serpin) and a heparin-binding protein. It is localized in vascular smooth muscle cells and endothelial cells of blood vessels, suggesting that it may be involved in the regulation of vascular function. It shows that kallistatin plays a role in neointima hyperplasia. The potential role of kallistatin was investigated in angiogenesis in vitro and in vivo, and presented results demonstrating a novel role of the protein in the inhibition of angiogenesis and tumor growth.
Product Categories/Family for SERPINA4 elisa kit	ELISA kits

NCBI AND UNIPROT INFORMATION

NCBI GI #	573459745
NCBI GeneID	5267
NCBI Accession #	NP_001275962.1
NCBI GenBank Nucleotide #	NM_001289033.1
UniProt Accession #	P29622; Q53XB5; Q86TR9; Q96BZ5
Molecular Weight	48,542 Da

NCBI Official Full Name	kallistatin isoform 2
NCBI Official Synonym Full Names	serpin peptidase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin), member 4
NCBI Official Symbol	SERPINA4
NCBI Official Synonym Symbols	KAL; KST; PI4; KLST; PI-4; kallistatin
NCBI Protein Information	kallistatin; serpin A4; kallikrein inhibitor; peptidase inhibitor 4; protease inhibitor 4 (kallistatin); serine (or cysteine) proteinase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin), member 4
UniProt Protein Name	Kallistatin
UniProt Gene Name	SERPINA4
UniProt Synonym Gene Names	KST; PI4; PI-4
UniProt Entry Name	KAIN_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://stage.aaabiotech.com/human-elisa-kits/kallistatin-serpina4/125876>