

Human Elafin/PI3 ELISA Kit | PI3 elisa kit

Human Elafin/PI3 Quick ELISA Kit

CATALOG #
AAA125889

REACTIVITY
Human

PRODUCT SYNONYMS

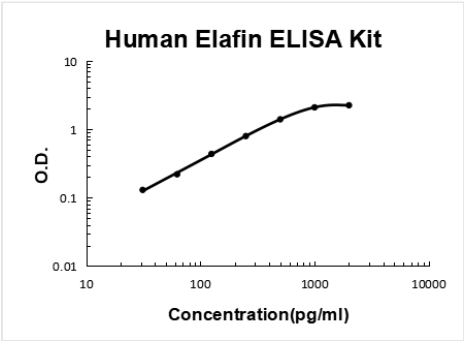
Elafin/PI3; Human Elafin/PI3 Quick ELISA Kit; Trappin-2/Elafin/Skulp|cementoin; Elafin; Elastase-specific inhibitor; ESI; ESIWAP four-disulfide core domain protein 14; Peptidase inhibitor 3; peptidase inhibitor 3; skin-derived; PI3; PI-3; pre-elafin; protease inhibitor 3; skin-derived (SKALP); Protease inhibitor WAP3; SKALP; SKALPELAFIN; Skin-derived antileukoproteinase; Trappin2; Trappin-2; WAP four-disulfide core domain 14; WAP3MGC13613; WFDC14elafin; PI3 elisa kit

PRODUCT SPECIFICATIONS

Reactivity	Human
Specificity	Natural and recombinant Human PI3
Assay Type	Colorimetric sandwich
Samples	cell culture supernatants, cell lysates, serum and plasma (heparin, EDTA)
Detection Range	31.2pg/ml-2,000pg/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 31.2 62.5 125 250 500 1000 2000 O.D. 0.024 0.154 0.244 0.461 0.821 1.425 2.122 2.274
Intra-Assay Precision	Sample 1 2 3 n 16 16 16 Mean(pg/ml) 67 269 902 Standard deviation 4.36 12.91 50.51 CV(%) 6.5% 4.8% 5.6%
Inter-Assay Precision	Sample 1 2 3 n 24 24 24 Mean(pg/ml) 75 263 887 Standard deviation 5.33 14.73 60.32 CV(%) 7.1% 5.6% 6.8%
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: 67 55 59 53 59 3.80 6.5% Sample 2: 269 260 270 259 265 11.37 4.3% Sample 3: 902 996 955 1033 972 56.35 5.8% *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: A23-Q117
Anticoagulant	heparin or EDTA
Benefits	The Quick ELISA kits, assay takes less than 1.5 hours. Detect Human Elafin/PI3 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 PI3 Pre-Coated ELISA (Enzyme-Linked Immunosorbent Assay) kit is a solid phase immunoassay specially designed to measure Human PI3 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 PI3 with immunogen: Expression system for standard: NS0; Immunogen sequence: A23-Q117. To measure Human PI3, 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 PI3 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 PI3 in the sample.
Assay Procedure Step 1	2000pg/ml, 1000pg/ml, 500pg/ml, 250pg/ml, 125pg/ml, 62.5pg/ml, 31.25pg/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 PI3 elisa kit	Elafin, also known as peptidase inhibitor 3 or skin-derived antileukoproteinase(SKALP) is a protein that in humans is encoded by the PI3 gene. It is mapped to 20q13. 12. This gene encodes an elastase-specific inhibitor that functions as an antimicrobial peptide against Gram-positive and Gram-negative bacteria. The protein contains a WAP-type four-disulfide core(WFDC) domain, and is thus a member of the WFDC domain family. Most WFDC gene members are localized to chromosome 20q12-q13 in two clusters: centromeric and telomeric. This gene belongs to the centromeric cluster. Expression of this gene is upgulated by bacterial lipopolysaccharides and cytokines. This gene is the neutrophil and pancreatic elastase-specific inhibitor of skin. It may prevent elastase-mediated tissue proteolysis.
Product Categories/Family for PI3 elisa kit	ELISA kits

NCBI AND UNIPROT INFORMATION

NCBI GI #	4505787
NCBI GeneID	5266
NCBI Accession #	NP_002629.1
NCBI GenBank Nucleotide #	NM_002638.3
UniProt Accession #	P19957; Q6FG74; E1P618

Molecular Weight	12,270 Da
NCBI Official Full Name	elafin preproprotein
NCBI Official Synonym Full Names	peptidase inhibitor 3
NCBI Official Symbol	PI3
NCBI Official Synonym Symbols	ESI; WAP3; SKALP; WFDC14; cementoin
NCBI Protein Information	elafin
UniProt Protein Name	Elafin
UniProt Gene Name	PI3
UniProt Synonym Gene Names	WAP3; WFDC14; ESI; PI-3; SKALP
UniProt Entry Name	ELAF_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/elafin-pi3/125889>