

Human Pan Trypsin ELISA Kit | PRSS1/2/3 elisa kit

Human Pan Trypsin PicoKine ELISA Kit

CATALOG #
AAA46699

REACTIVITY
Human

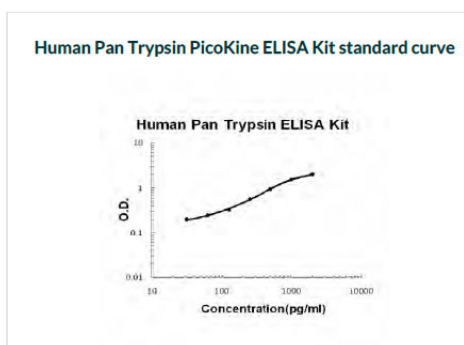
PRODUCT SYNONYMS

Pan Trypsin; Human Pan Trypsin PicoKine ELISA Kit; Trypsin-1; Beta-trypsin; Trypsin I; PRSS1; TRP1; TRY1; TRYP1; Trypsin-2; Anionic trypsinogen; Trypsin II; PRSS2; TRY2; TRYP2; Trypsin-3; Brain trypsinogen; Trypsin III; Trypsin IV; PRSS4; TRY3; TRY4; P07477; P07478; P35030; Trypsin-1/2/3; protease; serine 1/2/3; PRSS1/2/3 elisa kit

PRODUCT SPECIFICATIONS

Reactivity	Human
Specificity	Natural and recombinant Human Pan Trypsin
Sequence Length	247
Samples	Cell culture supernatants, serum and plasma (heparin)
Detection Range	31.2 pg/ml - 2,000 pg/ml
Sensitivity	<10 pg/ml
Intra-assay Precision	Intra-Assay Precision (Precision within an assay): Three samples of known concentration were tested on one plate to assess intra-assay precision.
Inter-assay Precision	Inter-Assay Precision (Precision across assays): Three samples of known concentration were tested in separate assays to assess inter-assay precision.
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



Standard Curve (Sample)

ADDITIONAL INFORMATION

Related Product Information for PRSS1/2/3 elisa kit

Background: Trypsin is a serine protease from the PA clan superfamily, found in the digestive system of many vertebrates, where it hydrolyses proteins. In the duodenum, trypsin catalyzes the hydrolysis of peptide bonds, breaking down proteins into smaller peptides. The peptide products are then further hydrolyzed into amino acids via other proteases, rendering them available for absorption into the blood stream. Tryptic digestion is a necessary step in protein absorption as proteins are generally too large to be absorbed through the lining of the small intestine. Additionally, Trypsin is produced as the inactive zymogen trypsinogen in the pancreas. When the pancreas is stimulated by cholecystokinin, it is then secreted into the first part of the small intestine (the duodenum) via the pancreatic duct. Once in the small intestine, the enzyme enteropeptidase activates trypsinogen into trypsin by proteolytic cleavage. Auto catalysis can happen with trypsin using trypsinogen as the substrate. This activation mechanism is common for most serine proteases, and serves to prevent autodegradation of the pancreas.

Principle of the Assay: The ?Picokine™ Human Pan Trypsin Pre-Coated ELISA (Enzyme-Linked Immunosorbent Assay) kit is a solid-phase immunoassay specially designed to measure Human Pan Trypsin with a 96-well strip plate that is pre-coated with antibody specific for Pan Trypsin. The detection antibody is a biotinylated antibody specific for Pan Trypsin. The capture antibody is monoclonal antibody from mouse and the detection antibody is polyclonal antibody from goat. The kit includes Human Pan Trypsin protein as standards. To measure Human Pan Trypsin, add standards and samples to the wells, then add the biotinylated detection antibody. Wash the wells with PBS or TBS buffer, and add Avidin-Biotin-Peroxidase Complex (ABC-HRP). Wash away the unbound ABC-HRP with PBS or TBS buffer and add TMB. TMB is an HRP substrate and will be catalyzed to produce a blue color product, which changes into yellow after adding the acidic stop solution. The absorbance of the yellow product at 450nm is linearly proportional to Human Pan Trypsin in the sample. Read the absorbance 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 Pan Trypsin in the sample.

NCBI AND UNIPROT INFORMATION

NCBI GI #	4506145
NCBI GeneID	5644
NCBI Accession #	NP_002760.1
NCBI GenBank Nucleotide #	NM_002769.4
UniProt Accession #	P07477; Q5NV57; Q7M4N3; Q7M4N4; Q92955; Q9HAN4; Q9HAN5; Q9HAN6; Q9HAN7; A1A509; A6NJ71; B2R5I5
Molecular Weight	26,558 Da
NCBI Official Full Name	trypsin-1 preproprotein
NCBI Official Synonym Full Names	protease, serine 1
NCBI Official Symbol	PRSS1
NCBI Official Synonym Symbols	TRP1; TRY1; TRY4; TRYP1
NCBI Protein Information	trypsin-1
UniProt Protein Name	Trypsin-1
UniProt Gene Name	PRSS1
UniProt Synonym Gene Names	TRP1; TRY1; TRYP1
UniProt Entry Name	TRY1_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.