

Datasheet for ABIN3044697

**TPSAB1 ELISA Kit**[Go to Product page](#)**1** Image

## Overview

Quantity:	96 tests
Target:	TPSAB1
Binding Specificity:	AA 1-275
Reactivity:	Human
Method Type:	Sandwich ELISA
Detection Range:	156-10000 pg/mL
Minimum Detection Limit:	156 pg/mL
Application:	ELISA

## Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Human Tryptase/TPSAB1,B2
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Serum, Plasma (heparin), Plasma (EDTA)
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Immunogen sequence: M1-V275
Specificity:	Expression system for standard: NSO Immunogen sequence: M1-V275
Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.
Sensitivity:	<15pg/mL

## Product Details

Material not included:	Microplate reader in standard size. Automated plate washer. Adjustable pipettes and pipette tips. Multichannel pipettes are recommended in the condition of large amount of samples in the detection. Clean tubes and Eppendorf tubes. Washing buffer (neutral PBS or TBS). Preparation of 0.01M TBS: Add 1.2g Tris, 8.5g NaCl
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## Target Details

Target:	TPSAB1
Alternative Name:	TPSAB1/TPSB2 ( <a href="#">TPSAB1 Products</a> )
Background:	<p>Protein Function: Tryptase is the major neutral protease present in mast cells and is secreted upon the coupled activation-degranulation response of this cell type. May play a role in innate immunity. .</p> <p>Background: Tryptases are serine proteases implicated in asthma and are highly expressed in human mast cells. They are derived from at least 4 nonallelic genes clustered on chromosome 16p13.3: TPSAB1, which represents the alpha and beta-I tryptase alleles, TPSB2, which represents the beta-II and beta-III tryptase alleles, TPSG1, and TPSD1. Elevated levels of serum tryptase occur in both anaphylactic and anaphylactoid reactions, but a negative test does not exclude anaphylaxis. Tryptase is less likely to be elevated in food allergy reactions as opposed to other causes of anaphylaxis.</p> <p>Synonyms: Tryptase beta-2,Tryptase-2,3.4.21.59,Tryptase II,TPSB2,TPS2,</p> <p>Full Gene Name: Tryptase beta-2</p> <p>Cellular Localisation: Secreted. Released from the secretory granules upon mast cell activation.</p>
Gene ID:	7177, 64499
UniProt:	<a href="#">P20231</a>

## Application Details

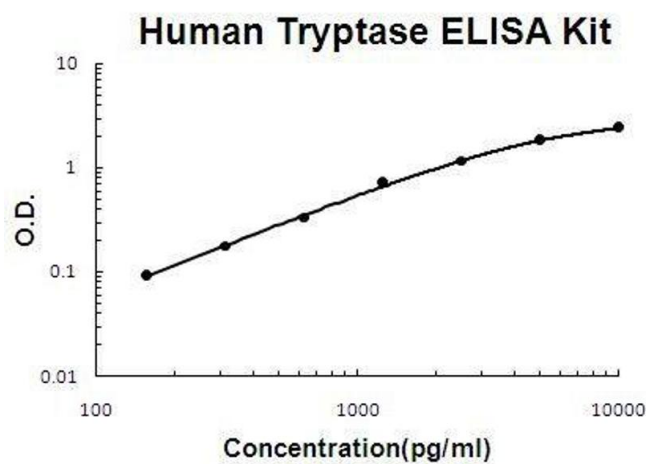
Application Notes:	Before using Kit, spin tubes and bring down all components to bottom of tube. Duplicate well assay was recommended for both standard and sample testing.
Comment:	Tissue Specificity: TPSAB1: Isoform 1 and isoform 2 are expressed in lung,stomach, spleen, heart and skin, in these tissues, isoform 1 ispredominant. Isoform 2 is expressed in aorta, spleen, and breasttumor, with highest levels in the endothelial cells of some bloodvessels surrounding the aorta, as well as those surrounding thetumor and low levels, if any, in mast cells (at protein level).
Plate:	Pre-coated

## Application Details

Protocol:	human Tryptase ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from mouse specific for Tryptase has been precoated onto 96-well plates. Standards(Expression system for standard: NSO, Immunogen sequence: M1-V275) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for Tryptase is added subsequently and then followed by washing with PBS or TBS buffer. Avidin-Biotin-Peroxidase Complex was added and unbound conjugates were washed away with PBS or TBS buffer. HRP substrate TMB was used to visualize HRP enzymatic reaction. TMB was catalyzed by HRP to produce a blue color product that changed into yellow after adding acidic stop solution. The density of yellow is proportional to the human Tryptase amount of sample captured in plate.
Assay Procedure:	Aliquot 0.1 mL per well of the 10000pg/mL, 5000pg/mL, 2500pg/mL, 1250pg/mL, 625pg/mL, 312pg/mL, 156pg/mL human Tryptase standard solutions into the precoated 96-well plate. Add 0.1 mL of the sample diluent buffer into the control well (Zero well). Add 0.1 mL of each properly diluted sample of human cell culture supernates, serum or plasma(heparin, EDTA) to each empty well. See "Sample Dilution Guideline" above for details. It is recommended that each human Tryptase standard solution and each sample be measured in duplicate.
Restrictions:	For Research Use only

## Handling

Buffer:	heparin or EDTA
Handling Advice:	Avoid multiple freeze-thaw cycles.
Storage:	4 °C, -20 °C
Storage Comment:	Store at 4°C for 6 months, at -20°C for 12 months. Avoid multiple freeze-thaw cycles
Expiry Date:	12 months



**ELISA**

**Image 1.** Human Tryptase PicoKine ELISA Kit standard curve