ARG81474
Human Mast Cell Tryptase ELISA Kit

Package: 96 wells
Store at: 4°C

Component

Cat. No.	Component Name	Package	Temp
ARG81474-001	Antibody-coated microplate	8 X 12 strips	4°C. Unused strips should be sealed tightly in the air-tight pouch.
ARG81474-002	Standard	2 X 10 ng/vial	4°C
ARG81474-003	Standard/Sample diluent	30 ml (Ready to use)	4°C
ARG81474-004	Antibody conjugate concentrate (100X)	1 vial (100 µl)	4°C
ARG81474-005	Antibody diluent buffer	12 ml (Ready to use)	4°C
ARG81474-006	HRP-Streptavidin concentrate (100X)	1 vial (100 µl)	4°C
ARG81474-007	HRP-Streptavidin diluent buffer	12 ml (Ready to use)	4°C
ARG81474-008	25X Wash buffer	20 ml	4°C
ARG81474-009	TMB substrate	10 ml (Ready to use)	4°C (Protect from light)
ARG81474-010	STOP solution	10 ml (Ready to use)	4°C
ARG81474-011	Plate sealer	4 strips	Room temperature

Summary

Product Description	ARG81474 Human Mast Cell Tryptase ELISA Kit is an Enzyme Immunoassay kit for the quantification of Human Mast Cell Tryptase in serum, plasma (heparin, EDTA) and cell culture supernatants.
Tested Reactivity	Hu
Tested Application	ELISA
Specificity	This kit detects all three tryptase types; A, B1 and B2. There is no detectable cross-reactivity with other relevant proteins.
Target Name	Mast Cell Tryptase
Conjugation	HRP
Conjugation Note	Substrate: TMB and read at 450 nm.
Sensitivity	78 pg/ml
Sample Type	Serum, plasma (heparin, EDTA) and cell culture supernatants.
Standard Range	156 - 10000 pg/ml
Sample Volume	100 µl

Precision	Intra-Assay CV: 7.3% Inter-Assay CV: 8.8%
Alternate Names	TPSAB1: Tryptase Alpha/Beta 1; TPSB1; TPS1; TPS2; Tryptase Alpha/Beta-1 TPSB2: Tryptase Beta 2; Tryptase Beta-2; EC 3.4.21.59; TPS2;Tryptase Beta 2 (Gene/Pseudogene)

Application Instructions

Assay Time	~ 5 hours

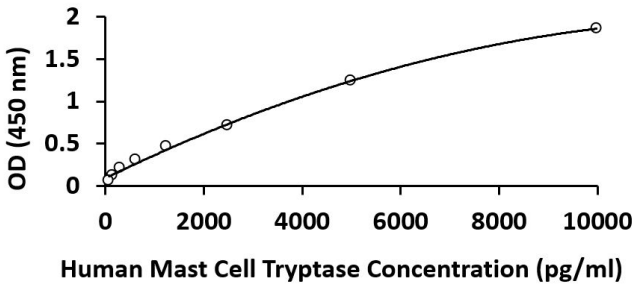
Properties

Form	96 well
Storage instruction	Store the kit at 2-8°C. Keep microplate wells sealed in a dry bag with desiccants. Do not expose test reagents to heat, sun or strong light during storage and usage. Please refer to the product user manual for detail temperatures of the components.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	TPSAB1; TPSB2
Gene Full Name	Tryptase Alpha/Beta 1; Tryptase beta 2
Background	Tryptases comprise a family of trypsin-like serine proteases, the peptidase family S1. Tryptases are enzymatically active only as heparin-stabilized tetramers, and they are resistant to all known endogenous proteinase inhibitors. Several tryptase genes are clustered on chromosome 16p13.3. These genes are characterized by several distinct features. They have a highly conserved 3' UTR and contain tandem repeat sequences at the 5' flank and 3' UTR which are thought to play a role in regulation of the mRNA stability. These genes have an intron immediately upstream of the initiator Met codon, which separates the site of transcription initiation from protein coding sequence. This feature is characteristic of tryptases but is unusual in other genes. The alleles of this gene exhibit an unusual amount of sequence variation, such that the alleles were once thought to represent two separate genes, alpha and beta 1. Beta tryptases appear to be the main isoenzymes expressed in mast cells; whereas in basophils, alpha tryptases predominate. Tryptases have been implicated as mediators in the pathogenesis of asthma and other allergic and inflammatory disorders. [provided by RefSeq, Jul 2008]
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. Isoform 2 cleaves large substrates, such as fibronectin, more efficiently than isoform 1, but seems less efficient toward small substrates.
Highlight	Related products: Mast Cell Tryptase antibodies; Mast Cell Tryptase ELISA Kits; New ELISA data calculation tool: Simplify the ELISA analysis by GainData

Images



ARG81474 Human Mast Cell Tryptase ELISA Kit standard curve image

ARG81474 Human Mast Cell Tryptase ELISA Kit results of a typical standard run with optical density reading at 450 nm.