Datasheet for ABIN1672867

MICB ELISA Kit

1 Image

Go to Product page

Overview

Quantity:	96 tests
Target:	MICB
Binding Specificity:	AA 23-298
Reactivity:	Human
Method Type:	Sandwich ELISA
Detection Range:	62.5-4000 pg/mL
Minimum Detection Limit:	62.5 pg/mL
Application:	ELISA

Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Human MICB
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Serum, Plasma (heparin), Plasma (EDTA)
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Expression system for standard: NSO Immunogen sequence: A23-G298
Specificity:	Expression system for standard: NSO Immunogen sequence: A23-G298
Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.

Product Details

Sensitivity:	<10pg/mL
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

Target Details

Target:	MICB
Alternative Name:	MICB (MICB Products)
Background:	Protein Function: Seems to have no role in antigen presentation. Acts as a stress-induced self-antigen that is recognized by gamma delta T cells. Ligand for the KLRK1/NKG2D receptor. Binding to KLRK1 leads to cell lysis. . Background: MHC class I polypeptide-related sequence B, also called MICB is a protein that in humans is encoded by the MICB gene. The MICB gene is mapped to 6p21.33. This gene encodes a heavily glycosylated protein which is a ligand for the NKG2D type II receptor. Binding of the ligand activates the cytolytic response of natural killer(NK) cells, CD8 alphabeta T cells, and gammadelta T cells which express the receptor. This protein is stress-induced and is similar to MHC class I molecules, however, it does not associate with beta-2-microglobulin or bind peptides. It seems to have no role in antigen presentation. This gene acts as a stress-induced self-antigen that is recognized by gamma delta T cells. It is the ligand for the KLRK1/NKG2D receptor and binds to KLRK1 leads to cell lysis. Synonyms: MHC class I polypeptide-related sequence B,MIC-B,MICB ,PERB11.2 , Full Gene Name: MHC class I polypeptide-related sequence B Cellular Localisation: Cell membrane, Single-pass type I membrane protein . Binding to human cytomegalovirus glycoprotein UL16 causes sequestration in the endoplasmic reticulum..
Gene ID:	4277
UniProt:	Q29980
Pathways:	Human Leukocyte Antigen (HLA) in Adaptive Immune Response

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.

Application Details

Comment:	Sequence similarities: Belongs to the MHC class I family. MIC subfamily. Tissue Specificity: Widely expressed with the exception of the central nervous system where it is absent. Expressed in many, but not all, epithelial tumors of lung, breast, kidney, ovary, prostate and colon. In hepatocellular carcinomas, expressed in tumor cells but not in surrounding non-cancerous tissue. .
Plate:	Pre-coated
Protocol:	human MICB ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from mouse specific for MICB has been precoated onto 96-well plates. Standards(NSO, A23-G298) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for MICB 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 MICB amount of sample captured in plate.
Assay Procedure:	Aliquot 0.1 mL per well of the 4000pg/mL, 2000pg/mL,1000pg/mL, 500pg/mL, 250pg/mL, 125pg/mL, 62.5pg/mL human MICB 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 MICB standard solution and each sample be measured in duplicate.
Assay Precision:	• Sample 1: n=16, Mean(pg/ml): 317, Standard deviation: 20.3, CV(%): 6.4 • Sample 2: n=16, Mean(pg/ml): 1323, Standard deviation: 68.8, CV(%): 5.2 • Sample 3: n=16, Mean(pg/ml): 2334, Standard deviation: 100.4, CV(%): 4.3, • Sample 1: n=24, Mean(pg/ml): 426, Standard deviation: 32.4, CV(%): 7.6 • Sample 2: n=24, Mean(pg/ml): 1518, Standard deviation: 97.2, CV(%): 6.4 • Sample 3: n=24, Mean(pg/ml): 2544, Standard deviation: 150.1, CV(%): 5.9
Restrictions:	For Research Use only

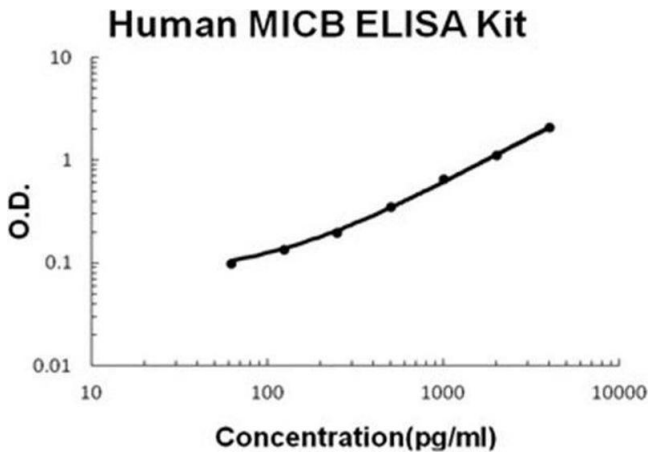
Handling

Handling Advice:	Avoid multiple freeze-thaw cycles.
Storage:	-20 °C,4 °C
Storage Comment:	Store at 4°C for 6 months, at -20°C for 12 months. Avoid multiple freeze-thaw cycles

Handling

Expiry Date:	12 months

Images



ELISA

Image 1. Human MICB PicoKine ELISA Kit standard curve