

Datasheet for ABIN1889365
MFGE8 ELISA Kit



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1 Image

Overview

Quantity:	96 tests
Target:	MFGE8
Binding Specificity:	AA 23-463
Reactivity:	Mouse
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 Mouse MFGE8/Lactadherin
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-C463
Specificity:	Expression system for standard: NSO Immunogen sequence: A23-C463
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: MFGE8

Alternative Name: MFGE8 ([MFGE8 Products](#))

Background: Protein Function: Contributes to phagocytic removal of apoptotic cells in many tissues. Specific ligand for the alpha-v/beta-3 and alpha- v/beta-5 receptors. Also binds to phosphatidylserine-enriched cell surfaces in a receptor-independent manner. Zona pellucida-binding protein which may play a role in gamete interaction (By similarity). Plays an important role in the maintenance of intestinal epithelial homeostasis and the promotion of mucosal healing. Promotes VEGF-dependent neovascularization. .

Background: MFGE8(Milk Fat Globule-Egf Factor 8), also called as Lactadherin or SED1, is a protein which in humans is encoded by the MFGE8 gene. Mfge8 is secreted protein found in vertebrates, including mammals as well as birds. By fluorescence in situ hybridization, the MFGE8 gene was mapped to chromosome 15q25. MFGE8 is a factor that links apoptotic cells to phagocytes. It specifically bound to apoptotic cells by recognizing aminophospholipids such as phosphatidylserine. MFGE8, when engaged by phospholipids, bound to cells via its RGD motif. It bound particularly strongly to cells expressing alpha-V-beta-3 integrin. It showed that Mfge8 was expressed in intestinal lamina propria macrophages in mice. Using a wound-healing assay, they showed that Mfge8 promoted migration of intestinal epithelial cells through a PKC-epsilon(PRKCE)-dependent mechanism.

Synonyms: Lactadherin,MFGM,Milk fat globule-EGF factor 8,MFG-E8,SED1,Sperm surface protein SP47,MP47,Mfge8,

Full Gene Name: Lactadherin

Cellular Localisation: Membrane, Peripheral membrane protein . Secreted.

Gene ID: 17304

UniProt: [P21956](#)

Pathways: [SARS-CoV-2 Protein Interactome](#)

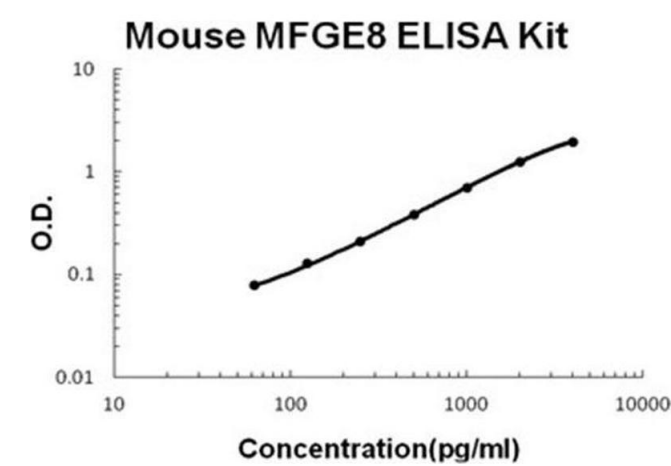
Application Details

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:	Sequence similarities: Contains 2 EGF-like domains. Tissue Specificity: Mammary epithelial cell surfaces and spermatozoan. Isoform 2 is present in brain, heart, kidney and spleen and at low levels in lung, liver, small intestine and testis. .
Plate:	Pre-coated
Protocol:	mouse MFGE8 ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from rat specific for MFGE8 has been precoated onto 96-well plates. Standards(NSO, A23-C463) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for MFGE8 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 mouse MFGE8 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 mouse MFGE8 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 mouse cell culture supernates, serum or plasma(heparin, EDTA) to each empty well. See "Sample Dilution Guideline" above for details. It is recommended that each mouse MFGE8 standard solution and each sample be measured in duplicate.
Assay Precision:	<ul style="list-style-type: none">• Sample 1: n=16, Mean(pg/ml): 528, Standard deviation: 22.2, CV(%): 4.2• Sample 2: n=16, Mean(pg/ml): 1467, Standard deviation: 73.35, CV(%): 5• Sample 3: n=16, Mean(pg/ml): 2375, Standard deviation: 116.4, CV(%): 4.9,• Sample 1: n=24, Mean(pg/ml): 621, Standard deviation: 37.9, CV(%): 6.1• Sample 2: n=24, Mean(pg/ml): 1623, Standard deviation: 113.6, CV(%): 7• Sample 3: n=24, Mean(pg/ml): 2644, Standard deviation: 153.4, CV(%): 5.8
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

Expiry Date: 12 months



ELISA

Image 1. Mouse MFGE8/Lactadherin PicoKine ELISA Kit standard curve