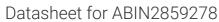
antibodies -online.com







TIMP1 ELISA Kit





Publications



Overview

Quantity:	96 tests
Target:	TIMP1
Binding Specificity:	AA 25-205
Reactivity:	Mouse
Method Type:	Sandwich ELISA
Detection Range:	31.2-2000 pg/mL
Minimum Detection Limit:	31.2 pg/mL
Application:	ELISA

Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Mouse TIMP-1
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: C25-R205
Specificity:	Expression system for standard: NSO Immunogen sequence: C25-R205
Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.

UniProt:

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:	TIMP1
Alternative Name:	TIMP1 (TIMP1 Products)
Background:	Protein Function: Metalloproteinase inhibitor that functions by forming one to one complexes
	with target metalloproteinases, such as collagenases, and irreversibly inactivates them by
	binding to their catalytic zinc cofactor. Acts on MMP1, MMP2, MMP3, MMP7, MMP8, MMP9,
	MMP10, MMP11, MMP12, MMP13 and MMP16. Does not act on MMP14 (By similarity). Also
	functions as a growth factor that regulates cell differentiation, migration and cell death and
	activates cellular signaling cascades via CD63 and ITGB1. Plays a role in integrin signaling
	Background: TIMP metallopeptidase inhibitor 1, also known as TIMP1, a tissue inhibitor of
	metalloproteinases, is a glycoprotein that is expressed from the several tissues of organisms.
	This protein is a member of the TIMP family. It was found to reside at Xp11.4-p11.1. This is the
	first growth factor found to be X-linked. The glycoprotein is a natural inhibitor of the matrix
	metalloproteinases (MMPs), a group of peptidases involved in degradation of the extracellular
	matrix. In addition to its inhibitory role against most of the known MMPs, the encoded protein is
	able to promote cell proliferation in a wide range of cell types, and may also have an anti-
	apoptotic function. What's more, TIMP1 is thought to play a regulatory role in connective
	tissues by forming inactive complexes with those metalloproteinases that are normally
	responsible for connective tissue turnover.
	Synonyms: Metalloproteinase inhibitor 1, Collagenase inhibitor 16C8 fibroblast, Erythroid-
	potentiating activity,EPA,TPA-S1,TPA-induced protein,Tissue inhibitor of metalloproteinases
	1,TIMP-1,Timp1,Timp, Timp-1,
	Full Gene Name: Metalloproteinase inhibitor 1
	Cellular Localisation: Secreted.
Gene ID:	21857

Order at www.antibodies-online.com | www.antikoerper-online.de | www.anticorps-enligne.fr | www.antibodies-online.cn International: +49 (0)241 95 163 153 | USA & Canada: +1 877 302 8632 | support@antibodies-online.com Page 2/4 | Product datasheet for ABIN2859278 | 09/11/2023 | Copyright antibodies-online. All rights reserved.

P12032

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: Belongs to the protease inhibitor I35 (TIMP) family.
	Tissue Specificity: Found in fetal and adult tissues. Highest levels are found in bone. Also found
	in lung, ovary and uterus.
Plate:	Pre-coated
Protocol:	mouse TIMP-1 ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent
	assay technology. A monoclonal antibody from rat specific for TIMP-1 has been precoated onto
	96-well plates. Standards(NSO, C25-R205) and test samples are added to the wells, a
	biotinylated detection polyclonal antibody from goat specific for TIMP-1 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 TIMP-1 amount of sample captured in plate.
Assay Procedure:	Aliquot 0.1 mL per well of the 2000pg/mL,1000pg/mL, 500pg/mL, 250pg/mL, 125pg/mL,
	62.5pg/mL, 31.2pg/mL mouse TIMP-1 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 TIMP-1 standard solution and each sample be measured in duplicate.
Assay Precision:	 Sample 1: n=16, Mean(pg/ml): 371, Standard deviation: 15.95, CV(%): 4.3
	 Sample 2: n=16, Mean(pg/ml): 602, Standard deviation: 29.5, CV(%): 4.9
	• Sample 3: n=16, Mean(pg/ml): 1025, Standard deviation: 36.9, CV(%): 3.6,
	 Sample 1: n=24, Mean(pg/ml): 382, Standard deviation: 24.45, CV(%): 6.4 Sample 2: n=24, Mean(pg/ml): 619, Standard deviation: 47.04, CV(%): 7.6
	 Sample 3: n=24, Mean(pg/ml): 1270, Standard deviation: 47.04, 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

Handling

Expiry Date:

12 months

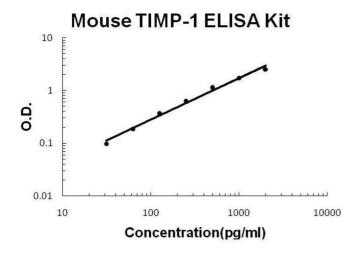
Publications

Product cited in:

Ge, Yu, Liu, Cong, Liu, Wang, Zhou, Lin: "Characterization of bone marrow-derived mesenchymal stem cells from dimethyloxallyl glycine-preconditioned mice: Evaluation of the feasibility of dimethyloxallyl glycine as a mobilization agent." in: **Molecular medicine reports**, Vol. 13, Issue 4, pp. 3498-506, (2016) (PubMed).

There are more publications referencing this product on: Product page

Images



ELISA

Image 1. Mouse TIMP-1 PicoKine ELISA Kit standard curve