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Datasheet for ABIN411333 MMP 9 ELISA Kit

1 Image

29 Publications



Overview

Quantity:	96 tests
Target:	MMP 9 (MMP9)
Binding Specificity:	AA 20-707
Reactivity:	Human
Method Type:	Sandwich ELISA
Detection Range:	156-10000 pg/mL
Minimum Detection Limit:	156 pg/mL
Application:	ELISA

Product Details

Sandwich High Sensitivity ELISA kit for Quantitative Detection of Human MMP-9
PicoKine™
Cell Culture Supernatant, Serum, Plasma (heparin), Saliva, Urine
Quantitative
Colorimetric
Expression system for standard: NSO Immunogen sequence: A20-D707
Expression system for standard: NSO Immunogen sequence: A20-D707
There is no detectable cross-reactivity with other relevant proteins.

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Product Details

Sensitivity:	<5pg/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:	MMP 9 (MMP9)
Alternative Name:	MMP9 (MMP9 Products)
Background:	Protein Function: May play an essential role in local proteolysis of the extracellular matrix and in
	leukocyte migration. Could play a role in bone osteoclastic resorption. Cleaves KiSS1 at a Gly- -
	Leu bond. Cleaves type IV and type V collagen into large C-terminal three quarter fragments and
	shorter N-terminal one quarter fragments. Degrades fibronectin but not laminin or Pz-peptide
	Background: The 92-kD type IV collagenase is also known as 92-kD gelatinase, type V
	collagenase, gelatinase B, or matrix metalloproteinase-9(MMP9). The 72- and 92- kDa type IV
	collagenases are members of a group of secreted zinc metalloproteases. The matrix
	metalloproteinases(MMPs) are able to degrade the extracellular matrix and allow angiogenesis
	and tumor invasion. Gelatinase B, a matrix metalloproteinase that has proteolytic activity
	against connective tissue proteins, has been suggested to be important in the connective tissue
	remodeling processes associated with atherogenesis and plaque rupture. MMP-9 is
	predominantly expressed in neutrophils, macrophages, and mast cells, rather than in oncogene-
	positive neoplastic cells. The polymorphism of MMP-9 acts as a genetic factor for the
	development of smoking-induced pulmonary emphysema. The standard product used in this kit
	is recombinant human MMP-9 with the molecular mass of 95KDa. The detected MMP-9
	includes zymogen and active enzyme.
	Synonyms: Matrix metalloproteinase-9,MMP-9,3.4.24.35,92 kDa gelatinase,92 kDa type IV
	collagenase,Gelatinase B,GELB,67 kDa matrix metalloproteinase-9,82 kDa matrix
	metalloproteinase-9,MMP9,CLG4B,
	Full Gene Name: Matrix metalloproteinase-9
	Cellular Localisation: Secreted, extracellular space, extracellular matrix.
Gene ID:	4318
UniProt:	P14780
Pathways:	Cellular Response to Molecule of Bacterial Origin, Positive Regulation of Immune Effector

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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 peptidase M10A family.	
	Tissue Specificity: Produced by normal alveolar macrophages and granulocytes.	
Plate:	Pre-coated	
Protocol:	human MMP-9 ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent	
	assay technology. A monoclonal antibody from mouse specific for MMP-9 has been precoated	
	onto 96-well plates. Standards(NSO, A20-D707) and test samples are added to the wells, a	
	biotinylated detection polyclonal antibody from goat specific for MMP-9 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 MMP-9 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 MMP-9 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, plasma(heparin), saliva or	
	urine to each empty well. See "Sample Dilution Guideline" above for details. It is recommended	
	that each human MMP-9 standard solution and each sample be measured in duplicate.	
Assay Precision:	Sample 1: n=16, Mean(ng/ml): 1.35, Standard deviation: 0.042, CV(%): 3.1	
	 Sample 2: n=16, Mean(ng/ml): 3.8, Standard deviation: 0.16, CV(%): 4.2 	
	 Sample 3: n=16, Mean(ng/ml): 6.9, Standard deviation: 0.24, CV(%): 3.5, 	
	 Sample 1: n=24, Mean(ng/ml): 1.7, Standard deviation: 0.095, CV(%): 5.6 Sample 2: n=24, Mean(ng/ml): 3.9, Standard deviation: 0.308, CV(%): 7.9 	
	 Sample 3: n=24, Mean(ng/ml): 7.1, Standard deviation: 0.511, CV(%): 7.2 	
Restrictions:	For Research Use only	
Handling		
Handling Advice:	Avoid multiple freeze-thaw cycles.	

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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

Publications

Product cited in: Leira, Ameijeira, Domínguez, López-Arias, Ávila-Gómez, Pérez-Mato, Sobrino, Campos, DAiuto, Leira, Blanco: "Periodontal inflammation is related to increased serum calcitonin gene-related peptide levels in patients with chronic migraine." in: **Journal of periodontology**, Vol. 90, Issue 10 , pp. 1088-1095, (2020) (PubMed).

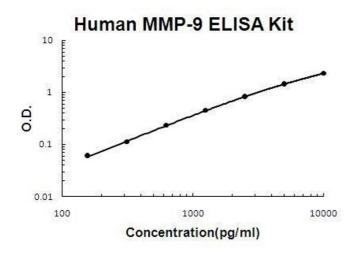
Tarperi, Sanchis-Gomar, Montagnana, Danese, Salvagno, Gelati, Skroce, Schena, Lippi: "Effects of endurance exercise on serum concentration of calcitonin gene-related peptide (CGRP): a potential link between exercise intensity and headache." in: **Clinical chemistry and laboratory medicine**, Vol. 58, Issue 10, pp. 1707-1712, (2020) (PubMed).

Pérez-Pereda, Toriello-Suárez, Ocejo-Vinyals, Guiral-Foz, Castillo-Obeso, Montes-Gómez, Martínez-Nieto, Iglesias, González-Quintanilla, Oterino: "Serum CGRP, VIP, and PACAP usefulness in migraine: a case-control study in chronic migraine patients in real clinical practice. " in: **Molecular biology reports**, Vol. 47, Issue 9, pp. 7125-7138, (2020) (PubMed).

Pinto-Sanchez, Hall, Ghajar, Nardelli, Bolino, Lau, Martin, Cominetti, Welsh, Rieder, Traynor, Gregory, De Palma, Pigrau, Ford, Macri, Berger, Bergonzelli, Surette, Collins, Moayyedi, Bercik: " Probiotic Bifidobacterium longum NCC3001 Reduces Depression Scores and Alters Brain Activity: A Pilot Study in Patients With Irritable Bowel Syndrome." in: **Gastroenterology**, Vol. 153, Issue 2, pp. 448-459.e8, (2017) (PubMed).

Lei, Zhu, Zhang, Duan, Lei, Huang: "Transient Receptor Potential Vanilloid Subtype 1 Inhibits Inflammation and Apoptosis via the Release of Calcitonin Gene-Related Peptide in the Heart after Myocardial Infarction." in: **Cardiology**, Vol. 134, Issue 4, pp. 436-43, (2016) (PubMed).

There are more publications referencing this product on: Product page



ELISA

Image 1. Human MMP-9 PicoKine ELISA Kit standard curve

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