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Datasheet for KOA0267

Human MMP-2 ELISA Kit

Overview

Description:	Human MMP-2 AccuSignal ELISA Kit - KOA0267
Item No.:	KOA0267
Size:	1 Kit
Applications:	ELISA
Reactivity:	Human
Range:	156 pg/ml - 10000 pg/ml

Product Details

Background:	Type IV collagenase, 72-kD, is officially designated matrix metalloproteinase-2(MMP2). It is also known as gelatinase, 72-kD. MMP-2 plays an essential role in angiogenesis and arteriogenesis, two processes critical to restoration of tissue perfusion after ischemia. MMP-2 expression is increased in tissue ischemia, but the responsible mechanisms remain unknown. Matrix metalloproteinases(MMPs) catalyze extracellular matrix degradation. Control of their activity is a promising target for therapy of diseases characterized by abnormal connective tissue turnover. MMPs are expressed as latent proenzymes that are activated by proteolytic cleavage that triggers a conformational change in the propeptide(cysteine switch). The structure of proMMP-2 reveals how the propeptide shields the catalytic cleft and that the cysteine switch may operate through cleavage of loops essential for propeptide stability. The gene is localized to 16q21 using somatic cell hybrids and in situ hybridization. The standard product used in this kit is recombinant human MMP-2, consisting of 631 amino acids with the molecular mass of 71KDa. The detected MMP-2 includes zymogen and active enzyme.
Synonyms:	72 kDa gelatinase, 72 kDa type IV collagenase, CLG 4, CLG 4A, CLG4, CLG4A, Collagenase type IV A, EC 3.4.24.24, Gelatinase A, Gelatinase alpha, Gelatinase neutrophil, Matrix metallopeptidase 2 (gelatinase A, 72kDa gelatinase, 72kDa type IV collagenase), Matrix metalloproteinase 2, Matrix metalloproteinase 2 (gelatinase A, 72kD gelatinase, 72kD type IV collagenase), Matrix metalloproteinase II, Matrix metalloproteinase-2, MMP 2, MMP II, MMP-2, MMP2, MMP2_HUMAN, MONA, Neutrophil gelatinase, PEX, TBE 1, TBE-1
Detection Kit Type:	ELISA Kit
Detection Range:	156 pg/ml - 10000 pg/ml
Sensitivity:	<10 pg/ml

Target Details

Gene Name:	MMP2
Reactivity:	Human
Immunogen:	Expression system for standard: NSO; Immunogen sequence: A30-C660
Purity/Specificity:	Natural and recombinant human total MMP-2. There is no detectable cross-reactivity with other relevant proteins.
Relevant Links:	• UniProtKB - P08253 • NCBI - NP_001121363.1 • GeneID - 4313 • KOA0267 Protocol

Application Details

Tested Applications:	ELISA
Application Note:	Useful in Sandwich ELISA for Quantitative Detection of Antigen. Aliquot 0.1ml per well of the 10000pg/ml, 5000pg/ml, 2500pg/ml, 1250pg/ml, 625pg/ml, 312pg/ml, 156pg/ml human MMP-2 standard solutions into the precoated 96-well plate. Add 0.1ml of the sample diluent buffer into the control well (Zero well). Add 0.1ml of each properly diluted sample of human cell culture supernatants, serum, or plasma (heparin) to each empty well. It is recommended that each human MMP-2 standard solution and each sample be measured in duplicate.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.

Formulation

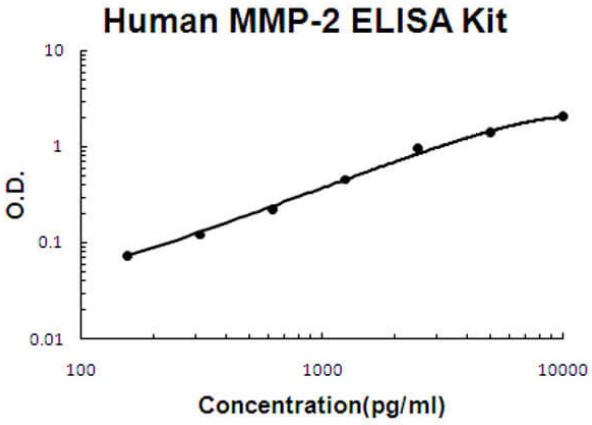
Anticoagulant:	Heparin Sodium

Shipping & Handling

Shipping Condition:	Wet Ice
Storage Condition:	Store vials at 4°C prior to opening. Centrifuge product if not completely clear after standing at room temperature. This product is stable for 6 months at 4°C as an undiluted liquid. Dilute only prior to immediate use. For extended storage freeze at -20°C or below for 12 months. Avoid cycles of freezing and thawing.

Expiration: See kit insert for complete instructions.

Images



ELISA
Human MMP-2 AccuSignal ELISA Kit standard curve. Assay Range: 156pg/ml-10000pg/ml. Sensitivity: <10pg/ml.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.