

Human MMP-3 ELISA Kit | MMP3 elisa kit

Human MMP-3 Quick ELISA Kit

CATALOG #
AAA125860

REACTIVITY
Human

PRODUCT SYNONYMS

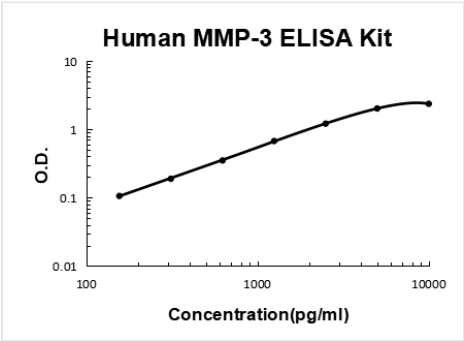
MMP-3; Human MMP-3 Quick ELISA Kit; MMP-3|CHDS6; EC 3. 4. 24; EC 3. 4. 24. 17; matrix metalloproteinase 3 (stromelysin 1; progelatinase); matrix metalloproteinase 3 (stromelysin 1; Matrix metalloproteinase-3; MGC126102; MGC126103; MMP3; proteoglycanase; SL-1; STMY; STMY1MGC126104; STR1; Stromelysin 1; stromelysin-1; transin-1; MMP3 elisa kit

PRODUCT SPECIFICATIONS

Reactivity	Human
Specificity	Natural and recombinant Human MMP3
Assay Type	Colorimetric sandwich
Samples	cell culture supernatants, serum and plasma (heparin)
Detection Range	156pg/ml-10,000pg/ml
Sensitivity	<10pg/ml
Capture/Detection Antibodies	Capture antibody- polyclonal antibody from goat Detection antibody- polyclonal antibody from goat
Sample Data	Concentration(pg/ml) 0 156 312 625 1250 2500 5000 10000 O.D. 0.042 0.148 0.231 0.392 0.716 1.254 2.061 2.405
Intra-Assay Precision	Sample 1 2 3 n 16 16 16 Mean(pg/ml) 288 1542 4697 Standard deviation 19.01 98.69 295.91 CV(%) 6.6% 6.4% 6.3%
Inter-Assay Precision	Sample 1 2 3 n 24 24 24 Mean(pg/ml) 315 1765 4511 Standard deviation 20.16 118.26 311.26 CV(%) 6.4% 6.7% 6.9%
Reproducibility	To assay reproducibility, three samples with differing target protein concentrations were assayed using four different lots. Lots: Lot 1 (pg/ml) Lot 2 (pg/ml) Lot 3 (pg/ml) Lot 4 (pg/ml) Mean (pg/ml) Standard Deviation CV (%) Sample 1: 288 301 305 267 290 18.29 6.3% Sample 2: 1542 1548 1686 1602 1595 52.62 3.3% Sample 3: 4697 3934 4512 4539 4421 256.39 5.8% *number of samples for each test n=16.
Cross Reactivity	There is no detectable cross-reactivity with other relevant proteins.
Immunogen	Expression system for standard: NS0; Immunogen sequence: Y18-C477
Anticoagulant	heparin
Benefits	The Quick ELISA kits, assay takes less than 1.5 hours. Detect Human MMP-3 with <10pg/ml sensitivity. Format: 96-well plate with removable strips. This is a TMB colorimetric sandwich ELISA kit with short assay time and quick experiment set up.

Principle	Human MMP3 Pre-Coated ELISA (Enzyme-Linked Immunosorbent Assay) kit is a solid phase immunoassay specially designed to measure Human MMP3 in cell culture supernatants, serum and plasma (heparin). It uses our proprietary Quick ELISA technology. Quick ELISA technology employs capture antibodies conjugated to an affinity tag that is recognized by the polyclonal antibody used to coat our Quick ELISA plates. This approach to sandwich ELISA allows the formation of the antibody-analyte sandwich complex in a single step, significantly reducing assay time. The kit contains recombinant Human MMP3 with immunogen: Expression system for standard: NS0; Immunogen sequence: Y18-C477. To measure Human MMP3, add standards and samples to the wells, then add antibody cocktail. Wash the wells with PBS or TBS buffer, and add TMB. TMB is substrate to HRP and will be catalyzed to produce a blue color product, which changes into yellow after adding acidic stop solution. The density of the yellow product is linearly proportional to Human MMP3 in the sample. Read the density of the yellow product in each well using a plate reader, and benchmark the sample wells' readings against the standard curve to determine the concentration of Human MMP3 in the sample.
Assay Procedure Step 1	10000pg/ml, 5000pg/ml, 2500pg/ml, 1250pg/ml, 625pg/ml, 312.5pg/ml, 156.25pg/ml
TMB Incubation Time	15
Preparation and Storage	Store at 4 degree C for 6 months, at -20 degree C for 12 months. Avoid multiple freeze-thaw cycles. (Shipped with wet ice.)

IMAGES



Application Data

ADDITIONAL INFORMATION

Related Product Information for MMP3 elisa kit	Matrix metalloproteinase-3(MMP-3) also called stromelysin or transin, is a proteoglycanase closely related to collagenase(MMP1) with a wide range of substrate specificities. The complete primary structure for human MMP-3, which has 477 residues including a 17-residue signal peptide. MMP-3 and collagenase are 54% identical in sequence, suggesting a common origin for the evolution of the two proteinases. MMP-3 and collagenase expression are coordinately modulated in synovial fibroblast cultures. MMP-3 is a secreted metalloprotease produced predominantly by connective tissue cells. Together with other metalloproteases, it can synergistically degrade the major components of the extracellular matrix. It is capable of degrading proteoglycan, fibronectin, laminin, and type IV collagen, but not interstitial type I collagen. MMP-3 genotype may be an important determinant of vascular remodeling and age-related arterial stiffening, with the heterozygote having the optimal balance between matrix accumulation and deposition. The standard product used in this kit is recombinant human MMP-3, consisting of 460 amino acids with the molecular mass of 52KDa. The detected MMP-3 includes zymogen and active enzyme.
Product Categories/Family for MMP3 elisa kit	ELISA kits

NCBI AND UNIPROT INFORMATION

NCBI GI #	4505217
NCBI GeneID	4314
NCBI Accession #	NP_002413.1

NCBI GenBank Nucleotide #	NM_002422.3
UniProt Accession #	P08254 ; Q3B7S0 ; Q6GRF8 ; B2R8B8
Molecular Weight	53,977 Da
NCBI Official Full Name	stromelysin-1 preproprotein
NCBI Official Synonym Full Names	matrix metallopeptidase 3 (stromelysin 1, progelatinase)
NCBI Official Symbol	MMP3
NCBI Official Synonym Symbols	SL-1; STMY; STR1; CHDS6; MMP-3; STMY1
NCBI Protein Information	stromelysin-1; transin-1; proteoglycanase; matrix metalloproteinase-3; matrix metalloproteinase 3 (stromelysin 1, progelatinase)
UniProt Protein Name	Stromelysin-1
UniProt Gene Name	MMP3
UniProt Synonym Gene Names	STMY1; SL-1; MMP-3
UniProt Entry Name	MMP3_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/mmp3-human-elisa-kits/mmp-3/125860>