

Rat Matrilin-4 ELISA Kit | MATN4 elisa kit

Rat Matrilin-4 PicoKine ELISA Kit

CATALOG #
AAA125242

REACTIVITY
Rat

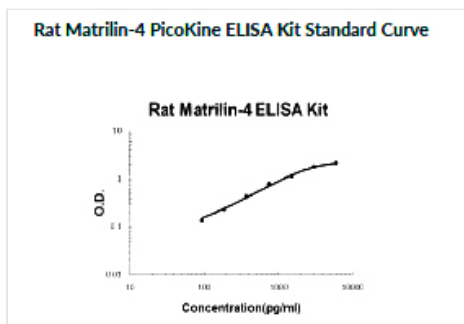
PRODUCT SYNONYMS

Matrilin-4; Rat Matrilin-4 PicoKine ELISA Kit; Rat Matrilin-4; Matrilin 4; Matn4; Matn4_predicted; rCG_32351; MATN4 elisa kit

PRODUCT SPECIFICATIONS

Reactivity	Rat
Specificity	Natural and recombinant Rat Matn4
Samples	Cell culture supernates, serum and plasma (heparin, EDTA)
Detection Range	93.7pg/ml-6000pg/ml
Sensitivity	<50pg/ml
Intra-assay Precision	Intra-Assay Precision (Precision within an assay): Three samples of known concentration were tested on one plate to assess intra-assay precision.
Inter-assay Precision	Inter-Assay Precision (Precision across assays):Three samples of known concentration were tested in separate assays to assess inter-assay precision.
Preparation and Storage	Store at 4 degree C for 6 months. Store at -20 degree C for 12 months. Avoid multiple freeze-thaw cycles.

IMAGES



Standard Curve (Sample)

ADDITIONAL INFORMATION

Related Product Information for MATN4 elisa kit	Principle of the Assay: The Picokine™ Rat Matn4 Pre-Coated ELISA (Enzyme-Linked Immunosorbent Assay) kit is a solid phase immunoassay specially designed to measure Rat Matn4 with a 96-well strip plate that is pre-coated with antibody specific for Matn4. The detection antibody is a biotinylated antibody specific for Matn4. The capture antibody is a monoclonal antibody from mouse, the detection antibody is a biotinylated polyclonal antibody from goat. The kit contains recombinant Rat Matn4 with immunogen: Expression system for standard: NSO, Immunogen sequence: Q22-K624. The kit is analytically validated with ready to use reagents. To measure Rat Matn4, add standards and samples to the wells, then add the biotinylated detection antibody. Wash the wells with PBS or TBS buffer, and add Avidin-Biotin-Peroxidase Complex (ABC-HRP). Wash away the unbounded ABC-HRP 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 Rat Matn4 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 Rat Matn4 in the sample.!!Background/Introduction: Matrilin-4 is a 73 kDa secreted glycoprotein that is a member of the matrilin family of the von Willebrand Factor-A (vWA) domain-containing superfamily. This gene is mapped to 3q42. Matrilins are modular extracellular matrix proteins that serve as adaptors and linkers for other matrix proteins. Matrilin-4, like Matrilin-2, has a broad distribution in both cartilage and in loose connective tissue such as dermis, lung and kidney, while Matrilins 1 and 3 are limited to cartilage. Matrilin-4 is present in nervous tissue and is abundant in the brain. Mature mouse Matrilin-4 shares 98%, 90%, 89% and 66% amino acid (aa) identity with rat, human, canine and chicken Matrilin-4, respectively. The 624 aa mouse Matrilin-4 contains a 22 aa signal sequence, two potential glycosylation sites, and four cysteine-rich EGF-like domains placed between two vWA domains. A short isoform lacks the N-terminal vWA domain. A C-terminal alpha -helix/coiled-coil region by which multimers are formed is often proteolytically removed so that Matrilin-4 is found as a mixture of monomers with homo- or hetero- dimers and trimers. Matrilin-4 forms multimers with Matrilins 1 and 2 but not with Matrilin-3. The N-terminal vWA domains of Matrilins associate with collagen IV microfibrils via the proteoglycans biglycan and decorin, linking the fibrils with other matrix constituents aggrecan and collagen II. Matrilins also show calcium-dependent binding to the cartilage oligomeric matrix protein (COMP); this interaction is of high affinity for oligomeric Matrilin-4 and somewhat lower affinity for monomeric Matrilin-4. Functions and distributions of Matrilins overlap enough so that knockouts of Matrilins 1, 2 and 3 lack obvious phenotypes.
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NCBI AND UNIPROT INFORMATION

NCBI GeneID	296358
UniProt Accession #	D3ZMS3
NCBI Official Synonym Full Names	matrilin 4
NCBI Official Symbol	Matn4
NCBI Protein Information	matrilin-4

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://stage.aaabiotech.com/matn4-rat-elisa-kits/matrilin-4/125242>