

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse Matrilin-2 in direct ELISAs and Western blots. In direct ELISAs, approximately 50% cross-reactivity with recombinant human Matrilin-2 is observed and less than 5% cross-reactivity with recombinant mouse (rm) Matrilin-3 and rmMatrilin-4 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse Matrilin-2 Arg24-Arg956 Accession # AAH05429
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Western Blot	0.1 µg/mL	Recombinant Mouse Matrilin-2 (Catalog # 3234-MN)

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Matrilin-2 is an extracellular matrix protein that belongs to the superfamily of von Willebrand factor A domain (VWA) containing proteins. It is expressed in many tissues and functions as a bridging component between other matrix molecules (1, 2, 3, 4). The mouse Matrilin-2 cDNA encodes a 956 amino acid (aa) precursor with a 23 aa signal sequence, two VWA domains separated by ten tandem EGF-like repeats, and a C-terminal coiled coil domain (5). Mouse Matrilin-2 shares 84%-87% aa sequence identity with human, rat, and canine Matrilin-2, and 26%, 21%, and 34% aa sequence identity with mouse Matrilin-1, -3, and -4, respectively. Matrilin-2 forms a variety of disulfide-linked oligomers via its coiled coil domain (4, 6-8). It can assemble into homotrimers or heterotrimers with Matrilin-1 and/or Matrilin-4 (4, 6, 7) but has not been detected in heterotrimers containing Matrilin-3 (7). The VWA domains are thought to mediate Matrilin-Matrilin interactions as well as interactions with other matrix proteins such as Fibronectin, Collagen I, Fibrillin-2, and Laminin-1/Nidogen-1 complexes (6). Matrilin-2 knockout mice do not display any obvious abnormalities, suggesting that the expression of other molecules can compensate for the lack of Matrilin-2 (9).

References:

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