Mouse Matrilin-2 Antibody

Monoclonal Rat IgG_{2A} Clone # 388207

Catalog Number: MAB3234

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse Matrilin-2 in direct ELISAs and Western blots. In direct ELISAs and Western blots, 20% cross-reactivity with recombinant human Matrilin-2 is observed and no cross-reactivity with recombinant mouse (rm) Matrilin-3 and rmMatrilin-4 is observed.
Source	Monoclonal Rat IgG_{2A} Clone # 388207
Purification	Protein A or G purified from hybridoma culture supernatant
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	1 µg/mL	Recombinant Mouse Matrilin-2 (Catalog # 3234-MN)

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 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.** ● 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, Fibrilin-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:

1. Wagener, R. *et al.* (2005) FEBS Lett. **579**:3323.
2. Deak, F. *et al.* (1999) Matrix Biol. **18**:55.
3. Whittaker, C.A. and R.O. Hynes (2002) Mol. Biol. Cell **13**:3369.
4. Piecha, D. *et al.* (1999) J. Biol. Chem. **274**:13353.
5. Deak, F. *et al.* (1997) J. Biol. Chem. **272**:9268.
6. Piecha, D. *et al.* (2002) Biochem. J. **367**:715.
7. Frank, S. *et al.* (2002) J. Biol. Chem. **277**:19071.
8. Pan, O.H. and K. Beck (1998) J. Biol. Chem. **273**:14205.
9. Mates, L. *et al.* (2004) Matrix Biol. **23**:195.

bio-techne®
Global bio-techne.com info@bio-techne.com techsupport@bio-techne.com TEL +1 612 379 2956
USA TEL 800 343 7475 Canada TEL 855 668 8722 China TEL +86 (21) 52380373
Europe | Middle East | Africa TEL +44 (0)1235 529449