

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 rmMa
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
Conjugate	Alexa Fluor 750 Excitation Wavelength: 749 nm Emission Wavelength: 775 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

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.

Western Blot Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

Stability & Storage Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

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).

PRODUCT SPECIFIC NOTICES

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