

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse Spinesin in direct ELISAs and Western blots. In direct ELISAs and Western blots, no cross-reactivity with recombinant human Spinesin is observed.
Source	Monoclonal Rat IgG _{2A} Clone # 282324
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse Spinesin Tyr61-Arg445 Accession # NP_109634
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 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.
Immunoprecipitation	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

Spinesin, encoded by the TMPRSS5 gene, is a new member of type II transmembrane serine proteases (TTSPs) (1). Mouse Spinesin contains the following structural domains: a short N-terminal cytoplasmic tail, a transmembrane domain, a stem region and a serine protease domain (2). The domain structure of Spinesin is common to other TTSPs, many of which have additional domains. The stem region of Spinesin contains a scavenger receptor-like domain. There could be 4 types of transcripts due to alternative splicing (3). Type 4 predicts 10 extra amino acids (aa) at the N-terminus as compared to type 3. The ectodomain corresponding to type 3 (aa 61-445) or type 4 (aa 71-455) was expressed and purified as a single chain pro-enzyme. By SDS-PAGE, the pro-enzyme migrates as multiple forms, possibly due to differential glycosylation. The pro-enzyme can be activated by trypsin treatment. The resulting enzyme is active and its activity is measured as described above. The activated enzyme is a disulfide bond-linked dimer.

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