

## DESCRIPTION

<b>Species Reactivity</b>	Mouse
<b>Specificity</b>	Detects mouse Spinesin in direct ELISAs and Western blots. In direct ELISAs and Western blots, no cross-reactivity with recombinant human Spinesin is observed.
<b>Source</b>	Monoclonal Rat IgG <sub>2A</sub> Clone # 282324
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant mouse Spinesin Tyr61-Arg445 Accession # NP_109634
<b>Conjugate</b>	Alexa Fluor 532 Excitation Wavelength: 534 nm Emission Wavelength: 553 nm
<b>Formulation</b>	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.

<b>Western Blot</b>	Optimal dilution of this antibody should be experimentally determined.
<b>Immunoprecipitation</b>	Optimal dilution of this antibody should be experimentally determined.

## PREPARATION AND STORAGE

<b>Shipping</b>	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	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.

## PRODUCT SPECIFIC NOTICES

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