

#### DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Human                                                                                                                                                                                                                                                                       |
| <b>Specificity</b>        | Detects human Trypsin 3/PRSS3 in Western blots. In Western blots, no cross-reactivity with recombinant human (rh) Trypsin-1 or rhTrypsin-2 is observed.                                                                                                                     |
| <b>Source</b>             | Monoclonal Rat IgG <sub>2A</sub> Clone # 420025                                                                                                                                                                                                                             |
| <b>Purification</b>       | Protein A or G purified from hybridoma culture supernatant                                                                                                                                                                                                                  |
| <b>Immunogen</b>          | Mouse myeloma cell line NS0-derived recombinant human Trypsin 3/PRSS3<br>Val16-Ser247<br>Accession # NP_002762                                                                                                                                                              |
| <b>Conjugate</b>          | Alexa Fluor 405<br>Excitation Wavelength: 405 nm<br>Emission Wavelength: 421 nm                                                                                                                                                                                             |
| <b>Formulation</b>        | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide<br><br>*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.

**Neutralization** 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

Human Trypsin 3, encoded by the PRSS3 gene, is also known as mesotrypsin (1). Constituting less than 10% of the total trypsin content in normal pancreatic juice, it is one of the three trypsin isoforms produced by the pancreas (2). Compared to trypsin 1 and 2, one intriguing feature of Trypsin 3 is its resistance to polypeptide trypsin inhibitors, such as the Kunitz-type soybean trypsin inhibitor or the Kazal-type pancreatic secretory trypsin inhibitor. As revealed by the crystal structure, this resistance is likely due to the presence of an arginine residue in place of the highly conserved Gly198 (3). Trypsin 3 is synthesized in the pancreas and secreted into the duodenum lumen, where it is activated by enterokinase. One proposed physiological function of Trypsin 3 is degradation of trypsin inhibitors, which facilitates the digestion of those foods rich in these proteins (4).

#### PRODUCT SPECIFIC NOTICES

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