

#### DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Human                                                                                                                                                                                                                                                                       |
| <b>Specificity</b>        | Detects human Trypsin 1/PRSS1 in direct ELISAs and Western blots. Does not cross-react with recombinant mouse (rm) Trypsin 3, recombinant human (rh) Trypsin 2, or rhTrypsin 3.                                                                                             |
| <b>Source</b>             | Monoclonal Mouse IgG <sub>1</sub> Clone # 446628                                                                                                                                                                                                                            |
| <b>Purification</b>       | Protein A or G purified from hybridoma culture supernatant                                                                                                                                                                                                                  |
| <b>Immunogen</b>          | Mouse myeloma cell line NS0-derived recombinant human Trypsin 1/PRSS1<br>Ala16-Ser247<br>Accession # P07477                                                                                                                                                                 |
| <b>Conjugate</b>          | Alexa Fluor 647<br>Excitation Wavelength: 650 nm<br>Emission Wavelength: 668 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.

|                            |                                                                        |
|----------------------------|------------------------------------------------------------------------|
| <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

Human Trypsin 1, encoded by the PRSS1 gene, is also known as cationic trypsinogen (1). Constituting approximately two-thirds of the total trypsin content in normal pancreatic juice, it is the most abundant trypsin isoform produced by the pancreas. It contains a signal peptide (residues 1-15), a pro region (residues 16-23), and a mature chain (residues 24-247). Trypsin 1 is synthesized in the pancreas and secreted into the duodenum lumen, where it is activated by enterokinase. Its major physiologic function is to digest food and to activate other pro-enzymes (2). Mutations in the PRSS1 gene can cause hereditary pancreatitis (3).

#### PRODUCT SPECIFIC NOTICES

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