

DESCRIPTION

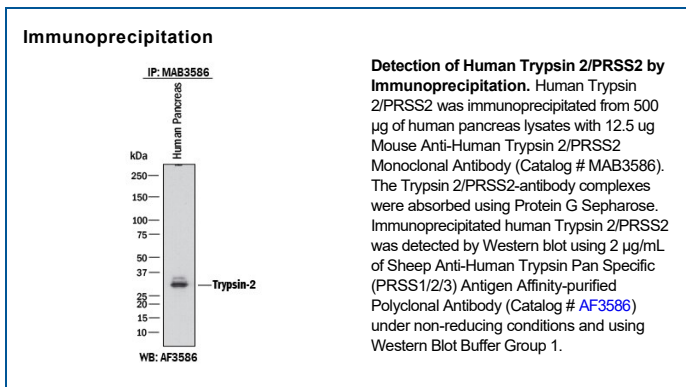
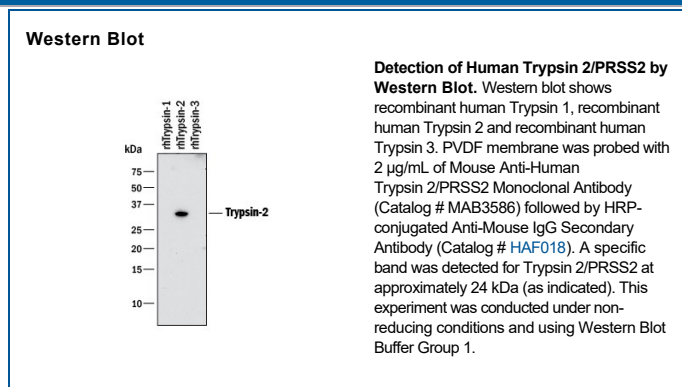
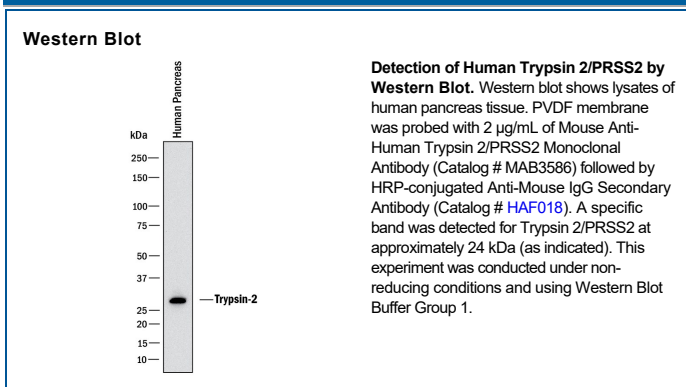
Species Reactivity	Human
Specificity	Detects human Trypsin 2/PRSS2 in direct ELISAs and Western blots. Does not cross-react with recombinant human (rh) Trypsin 1 or rhTrypsin 3. Recognizes both the pro and mature forms of rhTrypsin 2.
Source	Monoclonal Mouse IgG ₁ Clone # 410322
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Trypsin 2/PRSS2 Ala16-Ser247 Accession # P07478
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

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.

	Recommended Concentration	Sample
Western Blot	2 µg/mL	Human Pancreas Tissue and Recombinant Human Trypsin 2/PRSS2 under non-reducing conditions only
Immunoprecipitation	12.5 µg/500 µg cell lysate	Human pancreas tissue

DATA



PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Human Trypsin 2, encoded by the *PRSS2* gene, is also known as anionic Trypsin (1). Accounting for approximately 1/3 of the total trypsin content in the pancreatic juice, it is one of the trypsins produced in the pancreas. It consists of a signal peptide (residues 1-15), a pro region (residues 16-23), and a mature chain (residues 24-247). Trypsin 2 is synthesized as a zymogen and secreted into the duodenal lumen, where it is activated by enteropeptidase (2). It plays a central role in digestion and activating other pro-enzymes. In human pancreatic diseases and chronic alcoholism, it is up-regulated (3).

References:

1. Emi, M. *et al.* (1986) *Gene*. **41**:305.
2. Halfon, S. *et al.* (2004) in *Handbook of Proteolytic Enzymes* (ed. Barrett, *et al.*) pp. 1483-1488, Academic Press, San Diego.
3. Rinderknecht, H. *et al.* (1979) *Gut*. **20**:886.