

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Pepsinogen A4/PGA4 in direct ELISAs. Human PGA3 and PGA5 reactivity has not been demonstrated but is likely due to their high homology with human PGA4. In direct ELISAs, no cross-reactivity with recombinant human (rh) Pepsinogen C, rhCathepsin D, or rhCathepsin E is observed.
Source	Monoclonal Mouse IgG ₁ Clone # 762015
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Pepsinogen A4/PGA4 Ile16-Ala388 Accession # P00790
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.

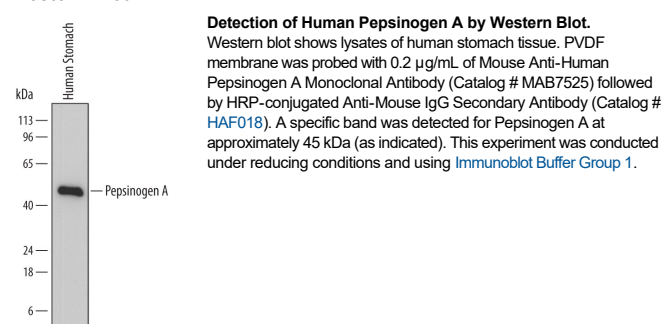
APPLICATIONS

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.

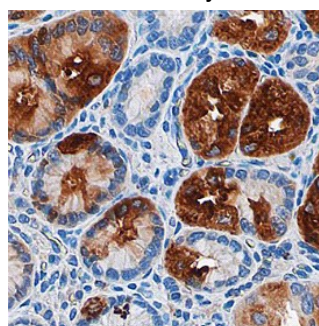
	Recommended Concentration	Sample
Western Blot	0.2 µg/mL	See Below
Immunohistochemistry	8-25 µg/mL	See Below

DATA

Western Blot



Immunohistochemistry



Pepsinogen A in Human Stomach.

Pepsinogen A was detected in immersion fixed paraffin-embedded sections of human stomach using Mouse Anti-Human Pepsinogen A Monoclonal Antibody (Catalog # MAB7525) at 15 µg/mL overnight at 4 °C. Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). Tissue was stained using the Anti-Mouse HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS002) and counterstained with hematoxylin (blue). Specific staining was localized to epithelial cells in gastric glands. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 mg/mL.
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

Pepsins are aspartic proteases that are synthesized in the gastric mucosa and secreted into the stomach. They are released as zymogens called pepsinogens and then converted to active pepsins by the acidic pH of gastric juices (1). PGA3, PGA4, and PGA5 are human Pepsinogen A isozymogens that differ in sequence by 2-4 amino acids (aa). Human pepsinogen A isozymogens share approximately 56% amino acid sequence identity with mouse and rat pepsinogen A isozymogens. Pepsins have optimal activity under conditions of acidic pH and are inhibited by pepstatin. Pepsin A has broad substrate specificity, but preferentially cleaves peptide bonds involving aromatic and aliphatic amino acids.