Human Pepsinogen A5/PGA5 Antibody

Antigen Affinity-purified Polyclonal Sheep IgG
Catalog Number: AF8457

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Pepsinogen A5/PGA5 in direct ELISAs and Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Pepsinogen A5/PGA5 Met1-Ala388 Accession # P0DJD7
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 as a 0.2 μm filtered solution in PBS.

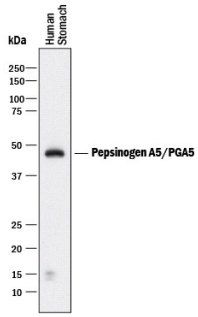
APPLICATIONS

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	0.1 µg/mL	See Below

DATA

Western Blot



Detection of Human Pepsinogen A5/PGA5 by Western Blot. Western blot shows lysates of human stomach tissue. PVDF membrane was probed with 0.1 µg/mL of Sheep Anti-Human Pepsinogen A5/PGA5 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF8457) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for Pepsinogen A5/PGA5 at approximately 45 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 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.** ● 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). PGA-3, PGA-4, and PGA-5 are isozymogens of human Pepsinogen A, which differ in amino acid sequence by 2-4 residues (2). This recombinant human Pepsinogen A corresponds to PGA-4. 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.

References:

1. Athauda, S.B. *et al.* (1989) J. Biochem. **106**:920.
2. Zwiers, A. *et al.* (1994) Clin. Nephrol. **41**:153.

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