

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Pepsinogen A5/PGA5 protein in direct ELISAs.
Source	Monoclonal Mouse IgG ₁ Clone # 974731
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Human embryonic kidney cell, HEK293-derived human Pepsinogen A5/PGA5 protein Ile16-Ala388 Accession # P0DJ9
Conjugate	Alexa Fluor 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *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.

Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunohistochemistry	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

Pepsins are aspartic proteases that are synthesized in the gastric mucosa and secreted into the stomach. They are released as zymogens called pepsinogens which are then converted to active pepsins by the acidic pH of gastric juices (1-3). PGA3, PGA4, and PGA5 are human Pepsinogen A isozymogens that differ in sequence by 24 amino acid (aa) residues (4, 5). This recombinant human Pepsinogen A corresponds to PGA5. Human Pepsinogen A isozymogens share approximately 56% aa sequence identity with mouse and rat Pepsinogen A isozymogens. Pepsins have optimal activity under conditions of acidic pH and are inhibited by pepstatin (6, 7). Pepsin A has broad substrate specificity, but preferentially cleaves peptide bonds involving aromatic and aliphatic amino acids.

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