

## Recombinant Human PGA5 / Pepsinogen 5,

### Animal Free & Carrier Free

Cat #: C-CYP349

Size: 5µg, 20µg, 100µg, 500µg, 1mg

Shipping: Blue Ice

### Product Overview

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). Diseases associated with PGA5 include Atrophic Gastritis and Gastritis.

### Product Information

**Source:** *Escherichia Coli*.

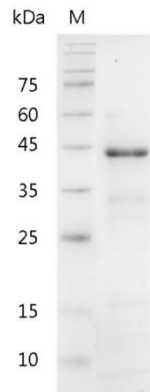
**Purity:** >95% as determined by SDS-PAGE. Ni-NTA chromatography.

**Endotoxin:** <0.1EU per 1µg of the protein by the LAL method.

**Amino acid sequence:**

MKWLLLLGLVALSECIMYKVPLIRKKSLRRTLSEKGLLKDFLKKHNLNPKARYFPQWEAPTLVDEQPLENYLDMEYFGTIGIGTPAQDFTVVE  
DTGSSNLWVPSVYCSSLACTNHNRFNPEDSSTYQSTSETVSITYGTGSMTGILGYDTVQVGGISDTNQIFGLSETEPGSFLYYAPFDGILGLAY  
PSISSGATPVFDNIWNQGLVSQDLFSVYLSADDKSGSVVIFGGIDSSYYTGSNLWVPTVEGYWQITVDSITMNGETIACAEGCQAIVDT  
GTSLLTGPTSPIANIQSDIGASENSDGMVVSACSAISSLPDIVFTINGVQYPVPPSAYILQSEGSCISGFQGMNVPTESGELWILGDVFIQRYF  
TVFDRANNQVGLAPVA with polyhistidine tag at the C-terminus.

**Formulation:** Lyophilized from a sterile filtered aqueous solution in 1×PBS, pH 8.0.



SDS-PAGE analysis of recombinant human PGA5

## Usage Method

1. Before opening, it is recommended to centrifuge at 3000-3500 rpm for 5 minutes.
2. Reconstitute to a concentration of 0.1-1.0 mg/mL in sterile distilled H<sub>2</sub>O. Allow the solution to sit at room temperature for at least 20 minutes to ensure complete dissolution. Avoid vigorous vortexing.
3. The reconstituted solution can be stored at 2-8°C for up to 1 week.
4. For long-term storage, it is recommended to further dilute the solution with a carrier protein (such as 0.1% BSA, 10% FBS, or 5% HSA) to a concentration of no less than 10 µg/mL and aliquot for storage at -20°C to -80°C for 3 to 6 months. If serum-free experiments are required, a 5% trehalose solution can be used as a carrier instead. Avoid repeated freeze-thaw cycles.

## Storage

Physical Appearance	Storage	Stability
Lyophilized powder	-20°C to -80°C	1 year
Reconstitution (initial)	2°C to 8°C	Less than 1 week
Reconstitution (after dilution)	-20°C to -80°C	3 to 6 months

## Note

The reagent is only used in the field of scientific research, not suitable for clinical diagnosis or other purposes.