

PGC

Native Human Pepsinogen II

Catalog No.	CNH003A CNH003C	Quantity:	100 µg 1 mg
Alternate Names:	Gastricsin, Pepsinogen C, EC:3.4.23.3		
Description:	Human Pepsinogen II/PGC is an aspartic proteinase that belongs to the peptidase family A1. PGC is a digestive enzyme that is produced in the stomach and constitutes a major component of the gastric mucosa. This protein is also secreted into the serum. PGC is synthesized as an inactive zymogen that includes a highly basic pro-segment. This enzyme is converted into its active mature form at low pH by sequential cleavage of the pro-segment that is carried out by the enzyme itself. Serum levels of this enzyme are used as a biomarker for certain gastric diseases including <i>Helicobacter pylori</i> related gastritis.		
UniProt ID:	P20142		
Source:	Human Gastric Mucosa		
Appearance:	White to off-white powder		
Solubility:	Clear, colorless solution (1 mg/ml in 0.02 M Tris-HCl, pH 8.0)		
Molecular Weight:	40,600		
Formulation:	Lyophilized from Tris chloride, pH 8.5.		
Purity:	≥ 90% by SDS-PAGE, may contain minor cleavage products. Identity confirmed by Western blot.		
Protein:	1.23 mg protein/vial ($E_{280\text{ nm}}^{0.1\%} = 1.43$)		
Specific Activity:	≥ 1,000 U/mg protein (after activation)		
Unit Definition:	One unit will produce a ΔA_{280} of 0.001 per minute at pH 2.0 and 37°C, measured as TCA-soluble products from hemoglobin.		
Reconstitution:	After reconstitution maintain at or above pH 8.0 to avoid activation.		
Storage & Stability:	Store at -20°C for up to 1 year. Avoid repeated freeze-thaw cycles of the reconstituted protein.		
Handling:	Handle as a potentially hazardous substance.		
Non-Infectious Disease Certification:	Non-reactive for HIV-1/HCV/HBV by NAT; HBsAg, HCV Ab, HIV-1&2 Ab and RPR by currently approved FDA methods. However, because no test method can offer complete assurance that infectious agents are absent, this material should be handled at Bio-Safety Level 2 (BSL 2) as recommended for potentially infectious human serum or blood specimen in the CCD/NIH manual "Biosafety in Microbiological and Biomedical Laboratories", 1999.		

NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.



Cell Sciences®
65 Parker Street
Unit 11
Newburyport, MA 01950

Toll Free: 888-769-1246
Phone: 978-572-1070
Fax: 978-992-0298

E-mail: info@cellsciences.com
Website: www.cellsciences.com