

Recombinant Human Pepsinogen C/PGC Protein (HEK293 Cells, His Tag)

Catalog Number: PKSH030916

Note: Centrifuge before opening to ensure complete recovery of vial contents.

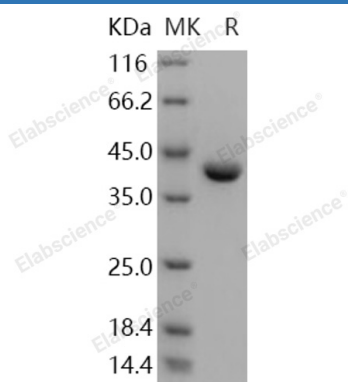
Description

Species	Human
Source	HEK293 Cells-derived Human Pepsinogen C/PGC protein Met 1-Ala 388, with an C-terminal His
Calculated MW	42 kDa
Observed MW	42 kDa
Accession	NP_002621.1
Bio-activity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile 50mM Tris, 150mM NaCl, pH 7.5 Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 95 % as determined by reducing SDS-PAGE.

Background

For Research Use Only

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Pepsinogen C, also known as PGC, is an aspartic proteinase that belongs to the peptidase family A1. Pepsinogen C is synthesized in the gastric mucosa as inactive precursors, known as zymogens. Pepsinogen C contains a prosegment that serves to stabilize the inactive form and prevent entry of the substrate to the active site. At low PH conditions, Pepsinogen C undergoes conversion into active enzyme. Pepsinogen C has been found expressed in all regions of the stomach mucosa and also in the proximal duodenal mucosa. In stomach cancer tissues and cancer cell lines, the expressions of the pepsinogen genes were decreased or lost, in good accordance with their pepsinogen productions. No gross structural changes of the pepsinogen genes were observed in these cancers, but the methylation patterns of the pepsinogen genes were found to be altered in different ways in different cancers. Serum levels of Pepsinogen C are used as a biomarker for certain gastric diseases including Helicobacter pylori related gastritis.