Human PGA4 / Pepsinogen A Protein (Fc Tag)

Catalog Number: 13082-H02H

General Information

Gene Name Synonym:

FLJ58952; FLJ77962; PGA3; PGA4; PGA5

Protein Construction:

A DNA sequence encoding the human PGA4 (NP_001073276.1) (Met 1-Ala 388) was fused with the Fc region of human IgG1 at the C-terminus.

Source: Human

Expression Host: HEK293 Cells

QC Testing

Purity: > 80 % as determined by SDS-PAGE

Bio Activity:

Measured by its ability to cleave the fluorogenic peptide substrate, Mca-RPKPVE-Nval-WRK(Dnp)-NH2, AnaSpec, Catalog # 27114. The specific activity is > 3000 pmoles/min/μg. (Activation description: The enzyme achieves its activity under acidic pH)

Endotoxin:

< 1.0 EU per μg of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70 ℃

Predicted N terminal: Ile 16

Molecular Mass:

The secreted recombinant human PGA4/Fc is a disulfide-linked homodimeric protein. The reduced monomer consists of 614 amino acids and has a predicted molecular mass of 67.3 kDa. The apparent molecular mass of rhPGA/Fc monomer is approximately 65-70 kDa in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

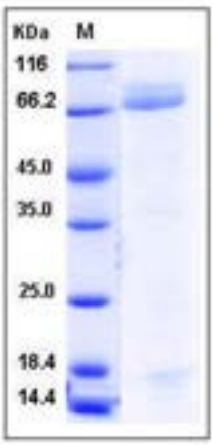
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

PGA4 (Pepsinogen 4, group I), or Pepsinogen A, is a member of the peptidase A1 family. Pepsin is expressed as a pro-form zymogen, pepsinogen, whose primary structure has an additional 44 amino acids. Pepsin is stored as pepsinogen so it will only be released when needed, and does not digest the body's own proteins in the stomach's lining. Five types of zymogens of pepsins, gastric digestive proteinases, are known: pepsinogens A, B, and F, progastricsin, and prochymosin. There are two major groups of pepsinogen, namely pepsinogen A (PGA) and pepsinogen C (PGC) (or progastricsin), and each frequently has isozymogens. The PGA3, PGA4 and PGA5 genes encode identical human pepsinogen A enzymes.