

Human Gastric intrinsic factor / GIF Protein (His Tag)

Catalog Number: 13544-H08H



Sino Biological Inc.
Biological Solution Specialist

General Information

Gene Name Synonym:

IF; IFMH; INF; TCN3; AV073125

Protein Construction:

A DNA sequence encoding the human GIF (P27352-1) (Met1-Tyr417) was expressed with a polyhistidine tag at the C-terminus.

Source: Human

Expression Host: Human Cells

QC Testing

Purity: > 95 % as determined by SDS-PAGE

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 °C

Predicted N terminal: Ser 19

Molecular Mass:

The recombinant human GIF consists of 410 amino acids and predicts a molecular mass of 44.8 KDa. It migrates as an approximately 49 KDa band 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:

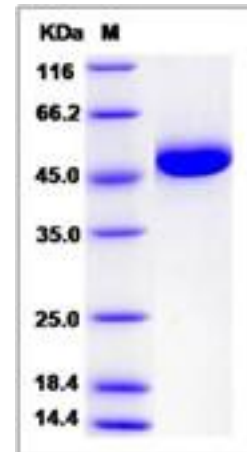
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Gastric intrinsic factor, also known as GIF, belongs to the of the cobalamin transport protein family. It is a glycoprotein produced by the parietal cells of the stomach. Gastric intrinsic factor plays a key role in the absorption of vitamin B12 on in the small intestine. Vitamin B12 binds to haptocorrin after entry into the stomach. The resulting complex enters the duodenum, where pancreatic enzymes digest haptocorrin. In the less acidic environment of the small intestine, B12 can then bind to gastric intrinsic factor. This new complex travels to the ileum, where special epithelial cells endocytose them. Inside the cell, B12 dissociates once again and binds to another protein, transcobalamin II. The new complex can exit the epithelial cells to enter the liver.

References

- 1.Gerdin AK. (2010) The Sanger Mouse Genetics Programme: high throughput characterisation of knockout mice. *Acta Ophthalmologica*. 88:925-7.
- 2.AU - Berlin H, *et al.* (1968) ORAL TREATMENT OF PERNICIOUS ANEMIA WITH HIGH DOSES OF VITAMIN B12 WITHOUT INTRINSIC FACTOR. *Acta Medica Scandinavica*. 184(1-6):247-58.
- 3.Hewitt JE, *et al.* (1991) Human gastric intrinsic factor: characterization of cDNA and genomic clones and localization to human chromosome 11. *Genomics*. 10(2):432-40.

Manufactured By Sino Biological Inc., FOR RESEARCH USE ONLY. NOT FOR USE IN HUMANS.

Fax :+86-10-51029969 • Tel:+86-400-890-9989 • <http://www.sinobiological.com>