



Recombinant Protein Technical Manual

**Recombinant Human Gastric intrinsic factor/GIF
Protein (His Tag)**
RPES4686

Product Data:

Product SKU: RPES4686

Size: 20µg

Species: Human

Expression host: HEK293 Cells

Uniprot: P27352

Protein Information:

Molecular Mass: 44.8 kDa

AP Molecular Mass: 49 kDa

Tag: C-His

Bio-activity:

Purity: > 95 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: 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 PBS, pH 7.4

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: IF;IFMH;INF;TCN3

Immunogen Information:

Sequence: Met 1-Tyr417

Background:

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 bounds 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.