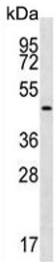
Gastric Intrinsic Factor Antibody / GIF Antibody (F54661)

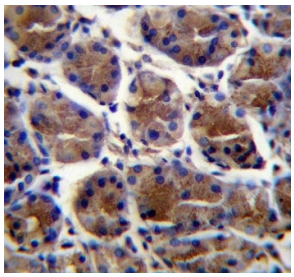
Catalog No.	Formulation	Size
F54661-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F54661-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

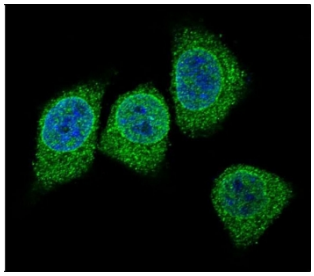
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity purified
UniProt	P27352
Applications	Flow cytometry: 1:25 (1x10e6 cells) Immunofluorescence: 1:25 Immunohistochemistry (FFPE): 1:25 Western blot: 1:500-1:2000
Limitations	This Gastric Intrinsic Factor Antibody / GIF Antibody is available for research use only.



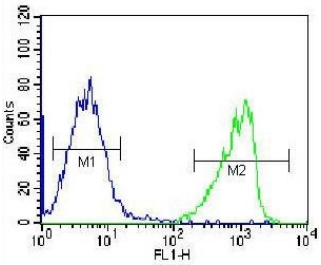
Gastric Intrinsic Factor Antibody Human K562 WB. Western blot analysis of human K562 cell lysate using Gastric Intrinsic Factor Antibody. A distinct band is detected at approximately 45 kDa, consistent with the predicted molecular weight of endogenous gastric intrinsic factor (GIF). These results demonstrate specific detection of Gastric Intrinsic Factor Antibody and support its use for investigating gastric intrinsic factor expression, vitamin B12 transport and cobalamin metabolism.



Gastric Intrinsic Factor Antibody Human Stomach IHC. Immunohistochemical staining of FFPE human stomach tissue using Gastric Intrinsic Factor Antibody following heat-induced epitope retrieval in pH6 citrate buffer with HRP/DAB detection. Strong cytoplasmic staining is observed in gastric gland parietal cells, consistent with the expected expression pattern of gastric intrinsic factor within the stomach mucosa. This staining demonstrates the utility of Gastric Intrinsic Factor Antibody for investigating GIF expression, vitamin B12 absorption and gastric epithelial biology.



Gastric Intrinsic Factor Antibody Human HEK293 IF. Immunofluorescent staining of human HEK293 cells using Gastric Intrinsic Factor Antibody (green) with DAPI nuclear counterstaining (blue). Gastric intrinsic factor exhibits predominantly cytoplasmic staining with a punctate distribution, consistent with its synthesis as a secreted glycoprotein involved in vitamin B12 binding and transport. This result demonstrates the utility of Gastric Intrinsic Factor Antibody for investigating GIF expression, cobalamin metabolism and intracellular processing of intrinsic factor in cultured human cells.



Gastric Intrinsic Factor Antibody Human K562 FACS. Flow cytometry analysis of human K562 cells stained with Gastric Intrinsic Factor Antibody. The green histogram (Gastric Intrinsic Factor antibody) shows a clear rightward shift compared with the isotype control (blue), demonstrating specific detection of endogenous gastric intrinsic factor. These results support the use of Gastric Intrinsic Factor Antibody for analyzing GIF expression, vitamin B12 transport protein biology and cobalamin metabolism by flow cytometry.

Description

Gastric Intrinsic Factor Antibody / GIF Antibody recognizes gastric intrinsic factor (GIF), also known as cobalamin binding intrinsic factor (CBLIF), a secreted glycoprotein produced by gastric parietal cells that is essential for vitamin B12 absorption. Following release into the stomach lumen, gastric intrinsic factor binds dietary cobalamin and protects it during transit through the gastrointestinal tract before facilitating receptor-mediated uptake in the terminal ileum. This highly specialized process is indispensable for maintaining vitamin B12 homeostasis and normal hematologic and neurologic function. NSJ Bioreagents offers high-quality Gastric Intrinsic Factor Antibody reagents for investigating nutrient absorption and gastric biology.

Gastric intrinsic factor is synthesized within the gastric mucosa and secreted into the stomach following food intake. After cobalamin is released from dietary proteins, intrinsic factor forms a stable complex that is recognized by specific receptors on ileal epithelial cells, enabling efficient intestinal absorption. Adequate vitamin B12 uptake supports DNA synthesis, erythropoiesis and normal nervous system function. Because of its central role in gastrointestinal physiology, Gastric Intrinsic Factor Antibody is widely used to investigate gastric epithelial function, vitamin B12 transport and digestive system biology.

Loss of gastric intrinsic factor production is a major cause of vitamin B12 deficiency and pernicious anemia. Autoimmune gastritis can damage parietal cells or generate antibodies that interfere with intrinsic factor function, reducing cobalamin absorption and ultimately leading to megaloblastic anemia and neurologic complications. Changes in GIF expression have also been examined in gastric disease, nutritional disorders and gastrointestinal pathology. Researchers frequently use Gastric Intrinsic Factor Antibody to investigate the molecular mechanisms underlying vitamin B12 deficiency and gastric epithelial function.

A Gastric Intrinsic Factor Antibody is a valuable reagent for studies of gastric physiology, vitamin B12 transport and gastrointestinal epithelial biology. A GIF Antibody supports research involving nutrient absorption, pernicious anemia, cobalamin metabolism and disorders affecting intrinsic factor function.

For an overview of intrinsic factor biology and its role in vitamin B12 absorption and gastrointestinal physiology, visit our CBLIF Antibody / Cobalamin Binding Intrinsic Factor Antibody page.

Application Notes

The stated application concentrations are suggested starting points. Titration of the Gastric Intrinsic Factor Antibody / GIF Antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 189-218 from the human protein was used as the immunogen for the Gastric Intrinsic Factor antibody.

Storage

Aliquot the Gastric Intrinsic Factor antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

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