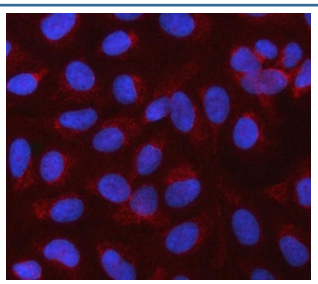
CBLIF Antibody / Cobalamin Binding Intrinsic Factor Antibody (RQ7732)

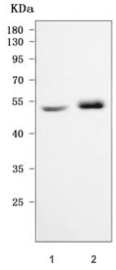
Catalog No.	Formulation	Size
RQ7732	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

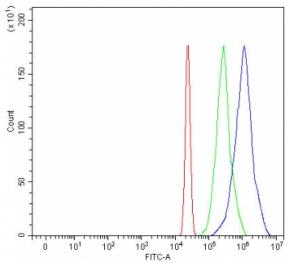
Species Reactivity	Human, Mouse
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P27352
Applications	Western blot: 0.5-1ug/ml Immunofluorescence: 5ug/ml Flow cytometry: 1-3ug/million cells Immunohistochemistry (FFPE): 2-5ug/ml Direct ELISA: 0.1-0.5ug/ml
Limitations	This CBLIF Antibody / Cobalamin Binding Intrinsic Factor Antibody is available for research use only.



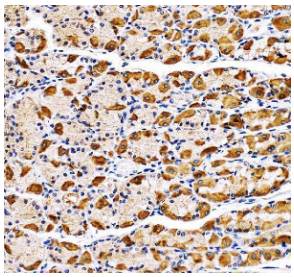
CBLIF Antibody Human U2OS IF. Immunofluorescent staining of U2OS human osteosarcoma cells using CBLIF Antibody (red) following enzyme-mediated antigen retrieval and DAPI nuclear counterstaining (blue). CBLIF displays predominantly cytoplasmic staining with a granular distribution, consistent with its synthesis as a secreted glycoprotein involved in vitamin B12 binding and transport. This result demonstrates the utility of CBLIF Antibody, a Cobalamin Binding Intrinsic Factor Antibody, for investigating intrinsic factor expression, vitamin B12 absorption and gastrointestinal protein biology in cultured human cells.



CBLIF Antibody Human and Mouse Stomach WB. Western blot analysis of CBLIF Antibody using lane 1: human HGC-27 cells and lane 2: mouse stomach tissue lysate. A specific band is detected at approximately 45-50 kDa in both samples, consistent with the predicted molecular weight of CBLIF, with the slightly higher apparent molecular weight reflecting expected glycosylation of this secreted glycoprotein. These results demonstrate cross-species detection of endogenous CBLIF and support the use of CBLIF Antibody, a Cobalamin Binding Intrinsic Factor Antibody, for studies of vitamin B12 absorption, gastric physiology and intrinsic factor biology.



CBLIF Antibody Human U937 FACS. Flow cytometry analysis of human U937 cells stained with CBLIF Antibody at 1 ug/10^6 cells following blocking with goat serum. The blue histogram (CBLIF) shows a clear rightward shift compared with the isotype control (green) and unstained cells (red), demonstrating specific detection of endogenous CBLIF. These results support the use of CBLIF Antibody, a Cobalamin Binding Intrinsic Factor Antibody, for analyzing intrinsic factor expression and vitamin B12 transport protein biology by flow cytometry.



CBLIF Antibody Human Stomach IHC. Immunohistochemical staining of FFPE human stomach tissue using CBLIF Antibody at 2 ug/ml with HRP/DAB detection following heat-induced epitope retrieval in pH8 EDTA buffer. Strong cytoplasmic staining is observed in gastric parietal cells, consistent with the expected expression of cobalamin binding intrinsic factor in the gastric mucosa. This staining pattern demonstrates the utility of CBLIF Antibody, a Cobalamin Binding Intrinsic Factor Antibody, for investigating vitamin B12 absorption, gastric physiology and intrinsic factor expression in human tissues.

Description

CBLIF Antibody / Cobalamin Binding Intrinsic Factor Antibody recognizes cobalamin binding intrinsic factor (CBLIF), a glycoprotein secreted by gastric parietal cells that is essential for the intestinal absorption of vitamin B12. After binding dietary cobalamin within the gastrointestinal tract, intrinsic factor protects the vitamin from degradation and facilitates its uptake in the distal ileum through receptor-mediated endocytosis. This highly specialized transport mechanism is critical for maintaining normal vitamin B12 homeostasis and supporting hematologic and neurologic health. NSJ Bioreagents offers high-quality CBLIF Antibody reagents for investigating vitamin B12 metabolism and gastrointestinal physiology.

CBLIF is synthesized primarily by parietal cells within the gastric mucosa and is released into the stomach lumen, where it associates with cobalamin following the digestion of dietary proteins. The resulting intrinsic factor-cobalamin complex binds to specific receptors expressed on ileal epithelial cells, allowing efficient absorption of vitamin B12 into the circulation. Adequate vitamin B12 uptake is required for DNA synthesis, red blood cell maturation, methylation reactions and normal nervous system function. Consequently, CBLIF Antibody is widely used to study gastric physiology, nutrient absorption and gastrointestinal epithelial biology.

Defects in intrinsic factor production or function can lead to vitamin B12 deficiency and are a major cause of pernicious anemia. Autoimmune destruction of gastric parietal cells or the production of intrinsic factor autoantibodies reduces cobalamin absorption, resulting in megaloblastic anemia and neurological complications if left untreated. In addition to autoimmune disease, altered intrinsic factor expression has been investigated in gastric disorders, gastrointestinal pathology and nutritional deficiencies. Continued research has improved understanding of the molecular mechanisms governing vitamin B12 transport and the maintenance of gastrointestinal health.

A CBLIF Antibody is a valuable reagent for investigating gastric physiology, vitamin B12 absorption and gastrointestinal epithelial biology. A Cobalamin Binding Intrinsic Factor Antibody supports research involving nutrient transport, pernicious anemia, gastrointestinal disease and the molecular regulation of cobalamin homeostasis.

Researchers studying vitamin B12 metabolism, nutrient absorption and gastrointestinal physiology may also be interested in our Metabolism Research Antibodies page, featuring antibodies against proteins involved in metabolic regulation and nutrient homeostasis.

Application Notes

Optimal dilution of the CBLIF Antibody / Cobalamin Binding Intrinsic Factor Antibody should be determined by the researcher.

Immunogen

E. coli-derived recombinant human protein (amino acids E128-Y417) was used as the immunogen for the CBLIF antibody.

Storage

After reconstitution, the CBLIF antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Alternate Names

CBLIF antibody, Cobalamin Binding Intrinsic Factor antibody, Intrinsic Factor antibody, Vitamin B12 Binding Protein antibody

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