

LTF Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP8698A

Specification

LTF Antibody - Product Information

Application Primary Accession Reactivity Host Clonality FC, WB,E
P02788
Human, Mouse
Rabbit
Polyclonal
Rabbit IgG

LTF Antibody - Additional Information

Gene ID 4057

Isotype

Other Names

Lactotransferrin, Lactoferrin, 3421-, Growth-inhibiting protein 12, Talalactoferrin, Lactoferricin-H, Lfcin-H, Kaliocin-1, Lactoferroxin-A, Lactoferroxin-B, Lactoferroxin-C, LTF, GIG12, LF

Target/Specificity

This LTF antibody is generated from rabbits immunized with LTF recombinant protein.

Dilution

FC~~1:10~50 WB~~1:4000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

LTF Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

LTF Antibody - Protein Information

Name LTF (HGNC:6720)

Synonyms GIG12, LF

Function Transferrins are iron binding transport proteins which can bind two Fe(3+) ions in association with the binding of an anion, usually bicarbonate.



Cellular Location

[Isoform 1]: Secreted. Cytoplasmic granule. Note=Secreted into most exocrine fluids by various endothelial cells Stored in the secondary granules of neutrophils

Tissue Location

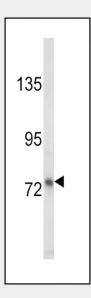
High levels are found in saliva and tears, intermediate levels in serum and plasma, and low levels in urine. In kidney, detected in the distal collecting tubules in the medulla but not in the cortical region or in blood vessels. Detected in peripheral blood neutrophils (at protein level). Isoform 1 and isoform DeltaLf are expressed in breast, prostate, spleen, pancreas, kidney, small intestine, lung, skeletal muscle, uterus, thymus and fetal liver Isoform 1 is expressed in brain, testis and peripheral blood leukocytes; isoform DeltaLf is barely detectable in these tissues Isoform DeltaLf is expressed in placenta, liver and ovary; isoform 1 is barely detectable in these tissues. In kidney, isoform 1 is expressed at high levels in the collecting tubules of the medulla but at very low levels in the cortex.

LTF Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

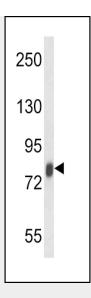
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

LTF Antibody - Images

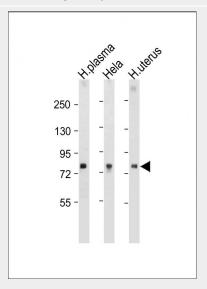


Western blot analysis of LTF Antibody (Cat. #AP8698a) in MDA-MB231 cell line lysates (35ug/lane). LTF (arrow) was detected using the purified Pab.



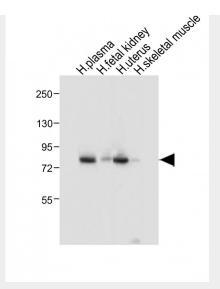


Western blot analysis of LTF Antibody (Cat. #AP8698a) in mouse spleen tissue lysates (35ug/lane). LTF (arrow) was detected using the purified Pab.

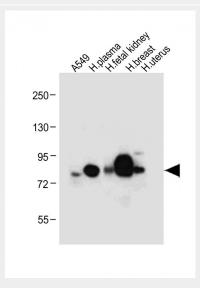


All lanes : Anti-LTF Antibody at 1:1000-2000 dilution Lane 1: Human plasma tissue lysate Lane 2: Hela whole cell lysate Lane 3: Human uterus tissue lysate Lysates/proteins at 20 μ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 78 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



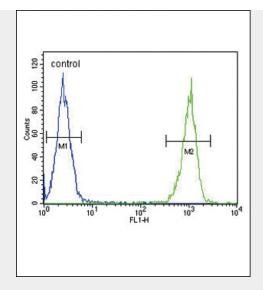


All lanes : Anti-LTF Antibody at 1:1000 dilution Lane 1: Human plasma tissue lysate Lane 2: Human fetal kidney tissue lysate Lane 3: Human uterus tissue lysate Lane 4: Human skeletal muscle tissue lysate Lysates/proteins at 20 μ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 78 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



All lanes: Anti-LTF Antibody at 1:4000 dilution Lane 1: A549 whole cell lysate Lane 2: Human plasma tissue lysate Lane 3: Human fetal kidney tissue lysate Lane 4: Human breast tissue lysate Lane 5: Human uterus tissue lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size: 78 kDa Blocking/Dilution buffer: 5% NFDM/TBST.





LTF Antibody (Cat. #AP8698a) flow cytometric analysis of MDA-MB231 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

LTF Antibody - Background

LTF is found in the secondary granules of neutrophils. The protein is a major iron-binding protein in milk and body secretions with an antimicrobial activity, making it an important component of the non-specific immune system. The protein demonstrates a broad spectrum of properties, including regulation of iron homeostasis, host defense against a broad range of microbial infections, anti-inflammatory activity, regulation of cellular growth and differentiation and protection against cancer development and metastasis.

LTF Antibody - References

Willnow, T.E., et.al., J. Biol. Chem. 267 (36), 26172-26180 (1992) **LTF Antibody - Citations**

• Targeted EpCAM-binding for the development of potent and effective anticancer proteins