

## LTF Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP8698A

## **Specification**

## **LTF Antibody - Product Information**

Application
Primary Accession
Reactivity
Host
Clonality
Isotype

WB, FC,E
P02788
Human, Mouse
Rabbit
Polyclonal
Rabbit IgG

# LTF Antibody - Additional Information

**Gene ID 4057** 

#### **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**

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

#### **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.



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#### **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**

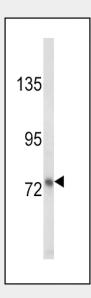
High levels are found in saliva and tears, intermediate levels in serum and plasma, and low levels in urine. In kidney, detected in the distal collecting tubules in the medulla but not in the cortical region or in blood vessels. Detected in peripheral blood neutrophils (at protein level). Isoform 1 and 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.

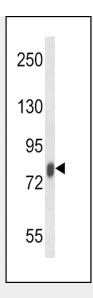
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# LTF Antibody - Images

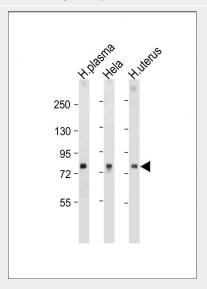


Western blot analysis of LTF Antibody (Cat. #AP8698a) in MDA-MB231 cell line lysates (35ug/lane). LTF (arrow) was detected using the purified Pab.



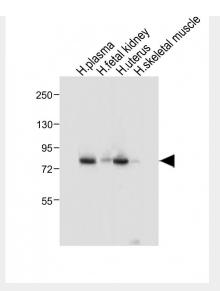


Western blot analysis of LTF Antibody (Cat. #AP8698a) in mouse spleen tissue lysates (35ug/lane). LTF (arrow) was detected using the purified Pab.

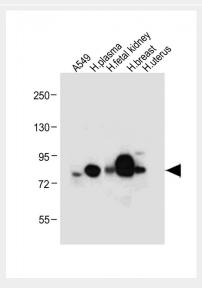


All lanes : Anti-LTF Antibody at 1:1000-2000 dilution Lane 1: Human plasma tissue lysate Lane 2: Hela whole cell lysate Lane 3: Human uterus tissue lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size :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



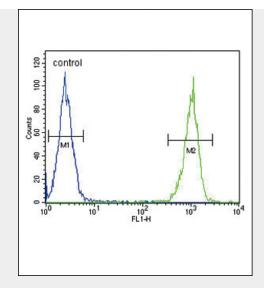


All lanes : Anti-LTF Antibody at 1:1000 dilution Lane 1: Human plasma tissue lysate Lane 2: Human fetal kidney tissue lysate Lane 3: Human uterus tissue lysate Lane 4: Human skeletal muscle tissue lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated 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  $\mu$ 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.





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