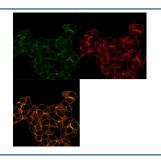


# Lactotransferrin Antibody / Lactoferrin / LTF [clone LTF/4074] (V4992)

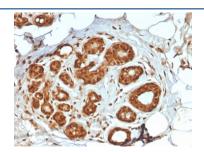
Catalog No.	Formulation	Size
V4992-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4992-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4992SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

## **Bulk quote request**

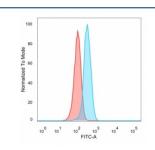
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2, kappa
Clone Name	LTF/4074
Purity	Protein A/G affinity
UniProt	P02788
Localization	Cytoplasm, Nuclear, Secreted
Applications	Flow Cytometry : 1-2ug/million cells Immunofluorescence : 1-2ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT
Limitations	This Lactotransferrin antibody is available for research use only.



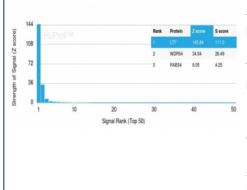
Immunofluorescent staining of PFA-fixed human MCF-7 cells with Lactotransferrin antibody (Green, clone LTF/4074); Red = Phalloidin; Yellow-Brown = superimposed.



IHC staining of FFPE human breast tissue with Lactotransferrin antibody (clone LTF/4074). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



Flow cytometry testing of PFA-fixed human MCF-7 cells with Lactotransferrin antibody (clone LTF/4074) followed by goat anti-mouse IgG-CF488 (blue); isotype control (red).



Analysis of a HuProt(TM) microarray containing more than 19,000 full-length human proteins using Lactotransferrin antibody (clone LTF/4074). Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt(TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProt(TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a mAb to its intended target. A mAb is considered to be specific to its intended target, if the mAb has an S-score of at least 2.5. For example, if a mAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that mAb to protein X is equal to 29.

### **Description**

Ferritin and transferrins manage necessary iron-binding functions for iron metabolism. Transferrins comprise a class of single-chain, two-sited, metal-binding proteins expressed throughout the fluid and cells of vertebrates. The three major types of transferrin include serotransferrin, lactotransferrin (lactoferrin) and ovotransferrin. Lactoferrin is found in milk, tears and leukocytes. It degrades an IgA1 protease secreted by Haemophilus influenzae and, consequently, allows the human IgA1 antibody to effectively abolish Haemophilus influenzae colonization. Lactoferrin also attenuates the pathogenic potential of Haemophilus influenzae by proteolytic degradation of the Hap adhesin. While lactoferrin may aid in the transmission of human T cell leukemiavirus type 1, it inhibits HIV-1 replication at the level of viral fusion and entry into cells. The inhibitory effects of lactoferrin on mixed lymphocyte reactions suggest that it may have the ability to sense the activation status of lymphocytes.

#### **Application Notes**

Optimal dilution of the Lactotransferrin antibody should be determined by the researcher.

#### **Immunogen**

A recombinant partial protein sequence (within amino acids 614-645) from the human protein was used as the immunogen for the Lactotransferrin antibody.

#### **Storage**

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