

## Lactotransferrin / Lactoferrin / LTF Antibody

Mouse Monoclonal Antibody [Clone LTF/4074]

| Catalog No      | Format                            | Size     |
|-----------------|-----------------------------------|----------|
| 4057-MSM4-P0    | Purified Ab with BSA and Azide    | 200ug/ml |
| 4057-MSM4-P1    | Purified Ab with BSA and Azide    | 200ug/ml |
| 4057-MSM4-P1ABX | Purified Ab WITHOUT BSA and Azide | 1.0mg/ml |

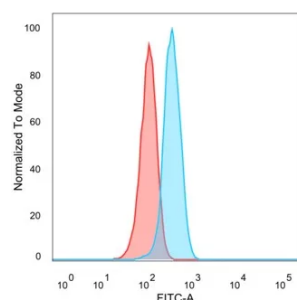
| Applications               | Tested Dillution    |
|----------------------------|---------------------|
| Flow Cytometry (Flow)      | 1-2ug/million cells |
| Immunofluorescence (IF)    | 1-3ug/ml            |
| Immunohistochemistry (IHC) | 1-2ug/ml            |

### Product Details

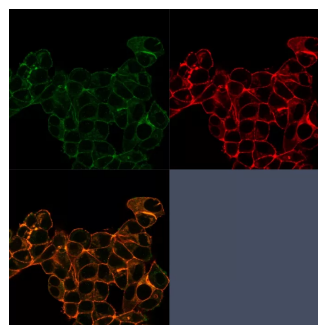
|                        |  |
|------------------------|--|
| Clone                  | LTF/4074   |
| Gene Name              | LTF  |
| Immunogen              | Recombinant fragment (around aa 614-645) of human Lactotransferrin protein (exact sequence is proprietary) |
| Host                   | Mouse  |
| Clonality              | Monoclonal   |
| Isotype / Light Chain  | IgG2 / Kappa   |
| Mol. Weight of Antigen | 78kDa  |
| Cellular Localization  | Cytoplasm. Secreted.   |
| Species Reactivity     | Human  |
| Positive Control       | MCF-7 cells. Human lactating breast or prostate tissue.  |

*\*Optimal dilution for a specific application should be determined.*

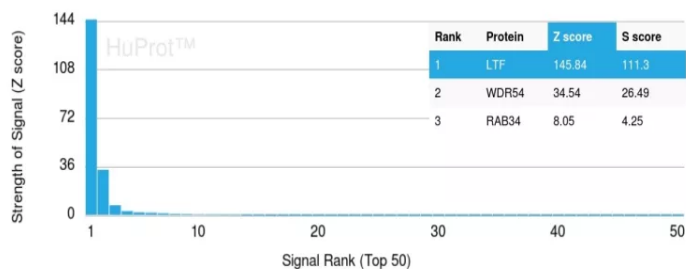
### Product Images for Lactotransferrin / Lactoferrin / LTF Antibody



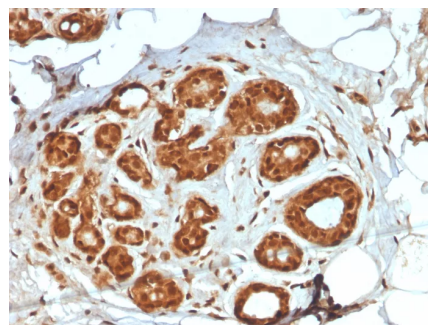
Flow cytometric analysis of PFA-fixed MCF-7 cells. Lactotransferrin Mouse Monoclonal Antibody (LTF/4074) followed by goat anti-mouse IgG-CF488 (blue); isotype control (red).



Immunofluorescence Analysis of PFA-fixed MCF-7 cells stained using Lactotransferrin Mouse Monoclonal Antibody (LTF/4074) followed by goat anti-mouse IgG-CF488 (green). CF640A phalloidin (red).



Analysis of Protein Array containing more than 19,000 full-length human proteins using Lactotransferrin Mouse Monoclonal Antibody (LTF/4074). Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt™ 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™ 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.



Formalin-fixed, paraffin-embedded human breast stained with Lactotransferrin Mouse Monoclonal Antibody (LTF/4074). HIER: Tris/EDTA, pH9.0, 45min. 2°C: HRP-polymer, 30min. DAB, 5min.

## Specificity & Comments

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 leukemia virus 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.

## Research Areas

Immunology, Infectious Disease

## Known Applications & Suggested Dilutions

Flow Cytometry (1-2ug/million cells) | Immunofluorescence (1-2ug/ml) | Immunohistochemistry (Formalin-fixed) (1-2ug/ml for 30 minutes at RT), (Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes), Optimal dilution for a specific application should be determined.

## Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis.

There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

## Supplied As

200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

## Storage and Stability

Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.