



# Lactoferrin Monoclonal Antibody(Q100)

<b>Catalog No</b>	YP-Ab-00634
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human
<b>Applications</b>	IF;IHC;ELISA
<b>Gene Name</b>	LTF
<b>Protein Name</b>	Lactotransferrin
<b>Immunogen</b>	Synthetic Peptide of Lactoferrin
<b>Specificity</b>	The antibody detects endogenous Lactoferrin protein.
<b>Formulation</b>	PBS, pH 7.4, containing 0.5%BSA, 0.02% sodium azide as Preservative and 50% Glycerol.
<b>Source</b>	Monoclonal, Mouse
<b>Purification</b>	The antibody was affinity-purified from mouse ascites by affinity-chromatography using specific immunogen.
<b>Dilution</b>	IF: 1:50-200 ELISA: 1:5000-10000 IHC 1:50-300
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	LTF; LF; Lactotransferrin; Lactoferrin; Talalactoferrin
<b>Observed Band</b>	77kD
<b>Cell Pathway</b>	[Isoform 1]: Secreted. Cytoplasmic granule. Secreted into most exocrine fluids by various endothelial cells. Stored in the secondary granules of neutrophils.; [Isoform DeltaLf]: Cytoplasm. Nucleus. Mainly localized in the cytoplasm.
<b>Tissue Specificity</b>	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 level
<b>Function</b>	catalytic activity:Preferential at -Arg-Ser-Arg-Arg- - and -Arg-Arg-Ser-Arg- -, and of Z-Phe-Arg- -aminomethylcoumarin.,function:Lactoferroxins A, B and C have opioid antagonist activity. Lactoferroxin A shows preference for mu-receptors, while lactoferroxin B and C have somewhat higher degrees of preference for kappa-receptors than for mu-receptors.,function:Lactotransferrin has antimicrobial activity which depends on the extracellular cation concentration.,function:The



lactotransferrin transferrin-like domain 1 functions as a serine protease of the peptidase S60 family that cuts arginine rich regions. This function contributes to the antimicrobial activity.,function:Transferrins are iron binding transport proteins which can bind two Fe(3+) ions in association with the binding of an anion, usually bicarbonate.,online information:Lactotransferrin entry,similarity:Belongs to the transferr

## Background

This gene is a member of the transferrin family of genes and its protein product 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. Antimicrobial, antiviral, antifungal and antiparasitic activity has been found for this protein and its peptides. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Sep 2014],

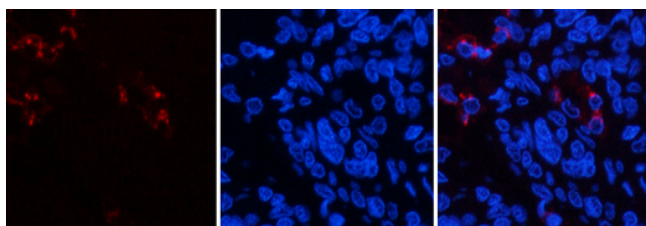
## matters needing attention

Avoid repeated freezing and thawing!

## Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

## Products Images

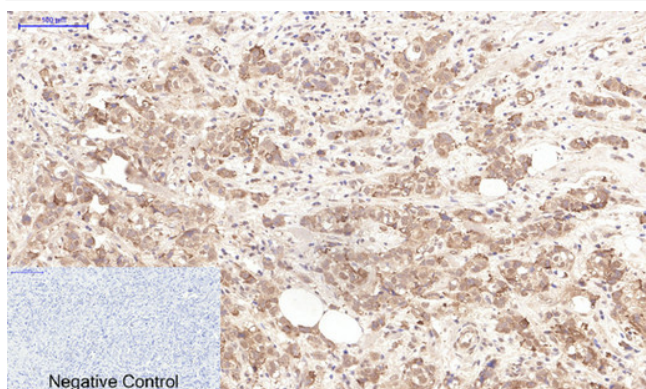


A

B

C

Immunofluorescence analysis of human-lung-cancer tissue. 1,Lactoferrin Monoclonal Antibody(Q100)(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



Negative Control

Immunohistochemical analysis of paraffin-embedded Human-breast-cancer tissue. 1,Lactoferrin Monoclonal Antibody(Q100) was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room temperature, 30min). Negative control was used by secondary antibody only.