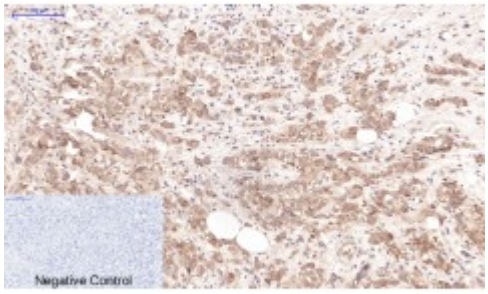
Anti-Lactoferrin antibody



Description	Lactoferrin is a protein encoded by the LTF gene which is approximately 78,1 kDa. Lactoferrin is localised to the cytoplasm and nucleus. It is involved in the innate immune system and the HIV life cycle. This protein falls under the transferrin family of genes and its protein product is found in the secondary granules of neutrophils. It 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. Lactoferrin is expressed in the blood, bone marrow, lung, eye and liver. Mutations in the LTF gene may result in dry eye syndrome. STJ97062 was developed from clone Q100 and was affinity-purified from mouse ascites by affinity-chromatography using specific immunogen. The antibody detects endogenous Lactoferrin protein.

Model	STJ97062
Host	Mouse
Reactivity	Human
Applications	ELISA
Immunogen	Synthetic Peptide
Gene ID	4057
Gene Symbol	LTF
Dilution range	ELISA: 1:5000-10000
Specificity	The antibody detects endogenous Lactoferrin protein.
Tissue Specificity	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 blo
Purification	The antibody was affinity-purified from mouse ascites by affinity-chromatography using specific immunogen.
Clone ID	Q100
Note	For Research Use Only (RUO).
Protein Name	Lactotransferrin Lactoferrin Growth-inhibiting protein 12 Talalactoferrin Lactoferricin-H Lfcin-H Kaliocin-1 Lactoferroxin-A Lactoferroxin-B Lactoferroxin-C
Clonality	Monoclonal
Conjugation	Unconjugated
Isotype	IgG1
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:6720OMIM:150210
Alternative Names	Lactotransferrin Lactoferrin Growth-inhibiting protein 12 Talalactoferrin Lactoferricin-H Lfcin-H Kaliocin-1 Lactoferroxin-A Lactoferroxin-B Lactoferroxin-C
Function	Transferrins are iron binding transport proteins which can bind two Fe(3+) ions in association with the binding of an anion, usually bicarbonate.; Lactotransferrin is a major iron-binding and multifunctional protein found in exocrine fluids such as breast milk and mucosal secretions. Has antimicrobial activity, which depends on the extracellular cation concentration. Antimicrobial properties include bacteriostasis, which is related to its ability to sequester free iron and thus inhibit microbial growth, as well as direct bactericidal properties leading to the release of lipopolysaccharides from the bacterial outer membrane. Can also prevent bacterial biofilm development in P.aeruginosa infection. Has weak antifungal activity against C.albicans. Has anabolic, differentiating and anti-apoptotic effects on osteoblasts and can also inhibit osteoclastogenesis, possibly playing a role in the regulation of bone growth. Promotes binding of species C adenoviruses to epithelial cells, promoting adenovirus infection. Can inhibit papillomavirus infections. Stimulates the TLR4 signaling pathway leading to NF-kappa-B activation and subsequent pro-inflammatory cytokine production while also interfering with the lipopolysaccharide (LPS)-stimulated TLR4 signaling. Inhibits neutrophil granulocyte migration to sites of apoptosis, when secreted by apoptotic cells. Stimulates VEGFA-mediated endothelial cell migration and proliferation. Binds heparin, chondroitin sulfate and possibly other glycosaminoglycans (GAGs). Also binds specifically to pneumococcal surface protein A (pspA), the lipid A portion of bacterial lipopolysaccharide (LPS), lysozyme and DNA.; Lactoferricin binds to the bacterial surface and is crucial for the bactericidal functions. Has some antiviral activity against papillomavirus infection. N-terminal region shows strong antifungal activity against

	C.albicans. Contains two BBXB heparin-binding consensus sequences that appear to form the predominate functional GAG-binding site.; Kaliocin-1 has antimicrobial activity and is able to permeabilize different ions through liposomal membranes.; 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.; 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. Shows a preferential cleavage at -Arg-Ser-Arg-Arg-|- and -Arg-Arg-Ser-Arg-|-, and of Z-Phe-Arg-|-aminomethylcoumarin sites.; Isoform DeltaLf: transcription factor with antiproliferative properties and ability to induce cell cycle arrest. Binds to the DeltaLf response element found in the SKP1, BAX, DCPS, and SELENOH promoters.
Cellular Localization	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.
Post-translational Modifications	Isoform DeltaLf: Ubiquitinated at Lys-379 and Lys-391.; Poly-N-acetyllactosaminic carbohydrate moiety seems to be needed for TLR4 activation.