



Lactoferrin Monoclonal Antibody(Q100)

Catalog No	YP-Ab-00634
Isotype	IgG
Reactivity	Human
Applications	IF;IHC;ELISA
Gene Name	LTF
Immunogen	Synthetic Peptide of Lactoferrin
Specificity	The antibody detects endogenous Lactoferrin protein.
Formulation	PBS, pH 7.4, containing 0.5%BSA, 0.02% sodium azide as Preservative and 50% Glycerol.
Source	Monoclonal, Mouse
Purification	The antibody was affinity-purified from mouse ascites by affinity-chromatography using specific immunogen.
Dilution	IF: 1:50-200 ELISA: 1:5000-10000 IHC 1:50-300
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	Lactoferrin;LTF;EC:3.4.21.-;GIG 12;GIG12;Lactotransferrin;LF;Talalactoferrin
Observed Band	77kD
Calculated Molecular Weight	77kD
Cell Pathway	[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.
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 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



Function

catalytic activity: Preferential at -Arg-Ser-Arg-Arg- and -Arg-Arg-Ser-Arg-, and of Z-Phe-Arg-aminomethylcoumarin., function: Lactoferrins A, B and C have opioid antagonist activity. Lactoferrin A shows preference for mu-receptors, while lactoferrin 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 transferrin

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],

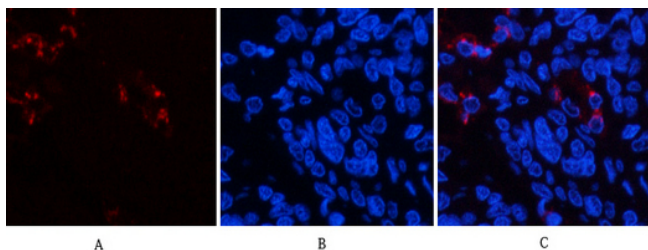
matters needing attention

Avoid repeated freezing and thawing!

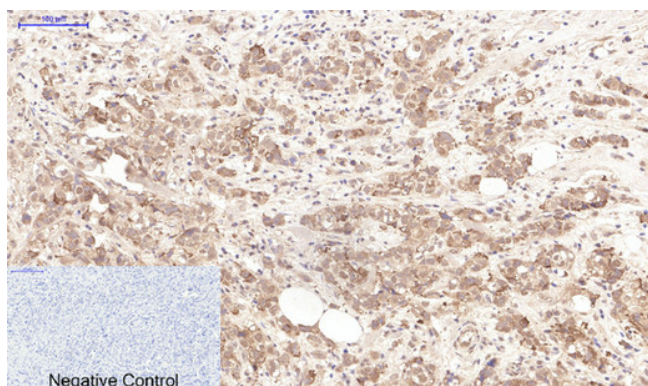
Usage suggestions

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

Products Images



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



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.