

Lactoferrin Active Protein | LTF active protein

Active Lactoferrin (LTF)

CATALOG #
AAA150100

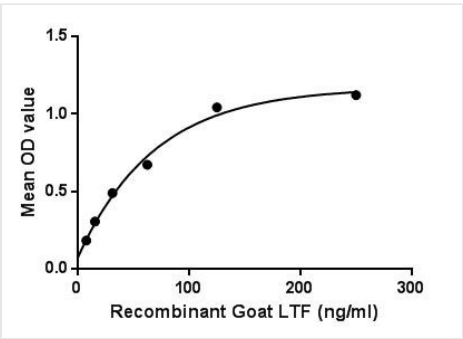
APPLICATIONS
Activity Assay, Cell Culture

PRODUCT SYNONYMS

Lactoferrin; Active Lactoferrin (LTF); HLF2; LF; GIG12; Lactotransferrin; Growth-inhibiting protein 12; Talalactoferrin; Lfcin-H; Kaliocin-1; LTF active protein

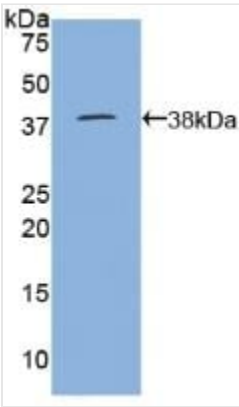
PRODUCT SPECIFICATIONS

Purity/Purification	>97%
Form/Format	Freeze-dried powder 20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
Sequence Positions	Val25~Glu352
Sequence Length	708
Applicable Applications for LTF active protein	Activity Assay, Cell Culture
Species	Goat
Tag	N-terminal His Tag
Isoelectric Point	8.9
Reconstitution	Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.
Preparation and Storage	Store at 2-8 degree C for one month. Aliquot and store at -80 degree C for 12 months. Avoid repeated freeze/thaw cycles. Stability: The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37 degree C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.

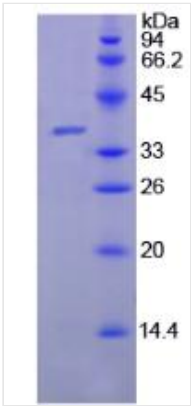


Bioactivity

Figure. The binding activity of LTF with CLU. Lactotransferrin (LTF), also known as actoferrin (LF), is a multifunctional protein of the transferrin family. Lactoferrin belongs to the innate immune system. Apart from its main biological function, namely binding and transport of iron ions, lactoferrin also has antibacterial, antiviral, antiparasitic, catalytic, anti-cancer, and anti-allergic functions and properties. LTF is widely represented in various secretory fluids, such as milk, saliva, tears, and nasal secretions. It also present in secondary granules of PMN and is secreted by some acinar cells. Besides, Clusterin (CLU) has been identified as an interactor of LTF, thus a binding ELISA assay was conducted to detect the interaction of recombinant goat LTF and recombinant goat CLU. Briefly, LTF were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100uL were then transferred to CLU-coated microtiter wells and incubated for 2h at 37. Wells were washed with PBST and incubated for 1h with anti-LTF pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37. Finally, add 50uL stop solution to the wells and read at 450nm immediately. The binding activity of LTF and CLU was shown in Figure 1, and this effect was in a dose dependent manner.



WB (Western Blot)
Figure. Western Blot



SDS-PAGE

Figure. SDS-PAGE

ADDITIONAL INFORMATION

Product Categories/Family for LTF active protein	Tumor immunity; Infection immunity
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NCBI AND UNIPROT INFORMATION

NCBI GI #	550822103
NCBI Accession #	NP_001272477.1
NCBI GenBank Nucleotide #	NP_001272477.1
UniProt Accession #	Q29477
Molecular Weight	Predicted Molecular Mass: 37.6kDa Accurate Molecular Mass: 37kDa

NCBI Official Full Name	lactotransferrin
UniProt Protein Name	Lactotransferrin
UniProt Gene Name	LTF
UniProt Synonym Gene Names	Lactoferrin

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/ltf-active-protein/lactoferrin/150100>