# Goat Lactoferrin protein, His tag

# Cat. No. GTX00078-pro

Applications	Functional Assay	<mark>Package</mark> 10 μg
Species	Goat	

### Applications

#### **Application Note**

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 100  $\mu$ l were then transferred to CLU-coated microtiter wells and incubated for 2h at 37°C. 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°C. Finally, add 50  $\mu$ l stop solution to the wells and read at 450nm immediately. The binding activity of LTF and CLU was in a dose dependent manner.

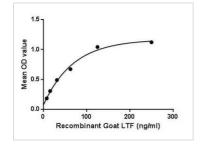
### Observed MW (kDa) 37 kDa.

Properties		
Form	Lyophilized powder	
Buffer	Reconstitute with 20mM Tris and 150mM NaCl to 0.1-1.0mg/ml. Do not vortex. Lyophilized from 20mM Tris, 150mM NaCl, 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose.	
Preservative	ProClin 300	
Storage	For short-term storage (1-2 weeks), store at 4°C. For long-term storage, store at -20°C or below. After reconstitution, keep as concentrated solution. Avoid freeze-thaw cycles.	
<b>Region/Sequence</b>	N-terminal His-Tag; Val25~Glu352 (NP_001272477.1)	
Expression System	E. coli	
Purity	> 97%	
Endotoxin	< 1 EU/µg	
Conjugation	Unconjugated	
Note	For laboratory use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human consumption.	



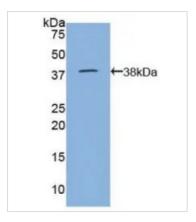
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## DATA IMAGES



# GTX00078-pro Functional Assay Image

Functional ELISA analysis of GTX00078-pro Goat Lactoferrin protein which can bind immobilized CLU protein.



# kDa 94 66.2 45 33 26 20 14.4

### GTX00078-pro Image

WB analysis of GTX00078-pro Goat Lactoferrin protein.

## GTX00078-pro Image

SDS-PAGE analysis of GTX00078-pro Goat Lactoferrin protein.



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