# Data Sheet (Cat.No.TMPJ-00513)

TargetMol

## LTF/Lactoferrin Protein, Human, Recombinant (His)

### General Information

| | |
|---|---|
| Synonyms: | Lactoferroxin-A;Talalactoferrin;LTF;Lactotransferrin;Lactoferroxin-B;Kaliocin-1;LF; Lactoferrin;Lactoferroxin-C |
| Protein Construction: | Gly20-Lys711 |
| Species: | Human |
| Expression Host: | HEK293 Cells |
| Accession: | AAH15822.1 |
| Molecular Weight: | 90 KDa (reducing condition) |
| AA Sequence: | Gly20-Lys711 |

### QC Testing

| | |
|---|---|
| Biological Activity: | Activity has not been tested. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first. |
| Purity: | Greater than 95% as determined by reducing SDS-PAGE. (QC verified) |
| Endotoxin: | < 0.1 ng/μg (1 EU/μg) as determined by LAL test. |
| Formulation: | Lyophilized from a solution filtered through a 0.22 μm filter, containing 20 mM PB, 150 mM NaCl, pH 7.4. |

### Preparation and Storage

Reconstitution:

Reconstitute the lyophilized protein in distilled water. The product concentration should not be less than 100 μg/ml. Before opening, centrifuge the tube to collect powder at the bottom. After adding the reconstitution buffer, avoid vortexing or pipetting for mixing.

Stability & Storage:

Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Shipping:

In general, Lyophilized powders are shipping with blue ice. Solutions are shipping with dry ice.

### Protein Background

Lactotransferrin is a member of the transferrin family that transfer iron to the cells and control the level of free iron in the blood and external secretions. Lactotransferrin is a secreted protein and contains two transferrin-like domains. Lactotransferrin can be cleaved into the following four chains: Kaliocin-1, Lactoferroxin-A, Lactoferroxin-B, and Lactoferroxin-C. Lactoferroxin A, Lactoferroxin B, and Lactoferroxin C have opioid antagonist activity. Lactoferroxin A shows preference for mu-receptors, while Lactoferroxin B and Lactoferroxin C have

somewhat higher degrees of preference for kappa-receptors than for mu-receptors. LTF has antimicrobial activity (bacteriocide, fungicide) and is part of the innate defense, mainly at mucoses.



Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481