

# **California Bioscience**

# **Product Datasheet**

Product Name	Lactoferrin Holo Human Recombinant
Cata No	CB501449
Source	Rice Flour
Synonyms	Lactotransferrin, LTF, LF, HLF2, GIG12, LTF Holo, Lactoferrin Holo, Talalactoferrin alfa.

## Description

Lactoferrin is a glycoprotein that belongs to the transferrin family of iron binding proteins. It is found in human breast milk as well as most epithelial surface secretions including tears, nasogastric, saliva, and bronchial. Lactoferrin binds 2 molecules of iron with very high affinity. Lactoferrin inhibits bacterial growth by withholding iron, its N-terminal region is an antimicrobial peptide. Lactotransferrin acts synergistically with lysozyme to potentiate the activity of both proteins. The multifunctional protein lactoferrin has many physiological possible roles. It is often referred to as an innate defense protein and frequently serves as the first line of defense in protection against pathogens. It has been shown to have the ability to bind iron, it is a natural anti-bacterial, anti-fungal and anti-viral, it is an antioxidant and it also has immunomodulatory properties. It has many beneficial properties, which make it a good candidate for a number of product applications. Considerable research is currently going on to explain the various suggested biological functions of lactoferrin.

Recombinant Human Holo Lactoferrin produced in Plant is a glycosylated polypeptide chain having an approximate molecular mass of 77-80 kDa. The Human Holo Lactotransferrin is purified by proprietary chromatographic techniques.

### **Physical Appearance**

Pink lyophilized powder.

### Purity

Greater than 90.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE. Formulation

The Human Holo lactotransferrin was lyophilized from water, contains 1.4mg iron/gram Lactoferrin. **Stability** 

Recombinant Holo Lactotransferrin although stable at room temperature for 5 days, should be stored desiccated below -18°C.

Please prevent freeze-thaw cycles.