

Recombinant Mouse Lactotransferrin/LTF Protein (His Tag)

Catalog No. PKSM040503

Note: Centrifuge before opening to ensure complete recovery of vial contents.

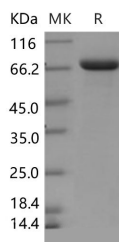
Description

Synonyms	Csp82;Lf;MMS10R;Ms10r
Species	Mouse
Expression Host	HEK293 Cells
Sequence	Met 1-Gln 707
Accession	AAH06904.1
Calculated Molecular Weight	77.2 kDa
Observed molecular weight	70 kDa
Tag	C-His
Bioactivity	Not validated for activity

Properties

Purity	> 92 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS, pH 7.4 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 92 % as determined by reducing SDS-PAGE.

Background

Lactotransferrin, also known as Lactoferrin, Talalactoferrin and LTF, is a secreted protein which belongs to the transferrin family. Transferrins are iron binding transport proteins which can bind two Fe³⁺ ions in association with the

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binding of an anion, usually bicarbonate. Lactotransferrin has antimicrobial activity which depends on the extracellular cation concentration. Lactoferroxins A, B and 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. Lactoferrin / LTF is a globular glycoprotein that is widely represented in various secretory fluids, such as milk, saliva, tears, and nasal secretions. Lactoferrin / LTF is also present in secondary granules of PMN and is secreted by some acinar cells. Lactoferrin / LTF can be purified from milk or produced recombinantly. Human colostrum has the highest concentration, followed by human milk, then cow milk. Lactoferrin / LTF is one of the components of the immune system of the body; it has antimicrobial activity (bactericide, fungicide) and is part of the innate defense, mainly at mucoses. In particular, lactoferrin provides antibacterial activity to human infants. Lactoferrin interacts with DNA and RNA, polysaccharides and heparin, and shows some of its biological functions in complexes with these ligands.