Product Data Sheet

Product Name: Lactoferrin (from bovine milk)
Cat. No.: GD15819

Chemical Properties

Cas. No.	936541-36-5		
Formula		M.Wt	~80kDa
Solubility	H_2O : ≥ 50 mg/mL	Storage	Store at -20°C
General tips	For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20°C for several months.		
Shipping Condition	Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.		
Structure			

Background

Lactoferrin is a substance released by neutrophils. Lactoferrin is an orally active multifunctional iron binding glycoprotein. Lactoferrin prevents cell adhesion, growth and spreading of cell colonies. Lactoferrin also has antiviral activity and inhibits microbial and viral adhesion and entry into host cells. Besides, Lactoferrin has anti-inflammatory, immunomodulatory, and anti-cancer activities.

Lactoferrin (0-1 000 渭g/mL, 7 days) inhibits epithelial cell (HaCaT) growth in a dose-dependent

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manner[1].

Lactoferrin (500 渭g/mL, 12 days) inhibits the spreading and growth of HaCaT cell colonies [1].
Lactoferrin (1.41 渭M and 0.12 渭M for human and bovine Lactoferrins) inhibits HSV-1 infection in vero cells by 50%[4].

Lactoferrin (recombinant human lactoferrin) (1,000 mg/kg, oral gavage, twice daily for 8 days) inhibits the growth of squamous cell carcinoma (O12) tumors in T cell鈥揵mmunocompromised nu/nu mice by 80%[5].
Lactoferrin (Bovine lactoferrin) (100 and 200 mg/kg, oral gavage,for 30 consecutive days) shows protective effects in a rat model of sepsis-induced acute lung injury[6].

[1]. P枚ll盲nen MT, et al. Lactoferrin impedes epithelial cell adhesion in vitro. J Periodontal Res. 1998 Jan;33(1):8-16.

[2]. Berlutti F, et al. Antiviral properties of lactoferrin--a natural immunity molecule. Molecules. 2011 Aug 16;16(8):6992-7018.

[3]. Cutone A, et al. Lactoferrin's Anti-Cancer Properties: Safety, Selectivity, and Wide Range of Action. Biomolecules. 2020 Mar 15;10(3):456.

[4]. Marchetti M, et al. Lactoferrin inhibits herpes simplex virus type 1 adsorption to Vero cells. Antiviral Res. 1996 Mar;29(2-3):221-31.

[5]. Varadhachary A, et al. Oral lactoferrin inhibits growth of established tumors and potentiates conventional chemotherapy. Int J Cancer. 2004 Sep 1;111(3):398-403.

[6]. Han N, et al. Effect of bovine lactoferrin as a novel therapeutic agent in a rat model of sepsis-induced acute lung injury. AMB Express. 2019 Oct 31;9(1):177.

Caution: Product has not been fully validated for medical applications. For research use only.
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