Product Data Sheet

Product Name: Lactoferrin (17-41) (acetate)
Cat. No.: GC60221

Chemical Properties

Cas. No.	2828433-30-1		
Formula	$C_{143}H_{226}N_{46}O_{33}S_3$	M.Wt	3183.82
Solubility	DMSO : 20 mg/mL (6.28 mM; ultrasonic and warming and heat to 60°C)	Storage	-20°C, protect from light
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			

FKCRRWQWRMKKLGAPSITCVRRAF
(Disulfide bridge: Cys3-Cys20) (acetate salt)

Background

Lactoferrin 17-41 (Lactoferricin B) acetate, a peptide corresponding to residues 17-41 of bovine lactoferrin, has antimicrobial activity against a wide range of microorganisms, including Gram-positive and Gramnegative bacteria, viruses, protozoa, and fungi. Lactoferrin 17-41 acetate has antitumor activities[1][2].

Lactoferrin 17-41 (Lactoferricin B) acetate has an MIC of 30 μg/ml against E. coli ATCC

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25922[1].Lactoferrin 17-41 acetate significantly stimulates apoptosis of HT-29 cells and displays cytotoxic activity on HT-29 cells[2].Lactoferrin 17-41 acetate variously regulats transcription of genes involved in the p53 signaling pathway, such as PMAIP-1, TP5313, and SFN[2].Lactoferrin 17-41 acetate can bind LPS from Gram-negative bacteria and that it can inhibit LPS induced cytokine response in human monocytic cells[1][3]. Cell Viability Assay[1] Cell Line: HT-29 cells

[1]. Samuelsen Ø, et al. Anti-complement effects of lactoferrin-derived peptides. FEMS Immunol Med Microbiol. 2004 Jun 1;41(2):141-8. [2]. Jiang R, et al. Bovine lactoferrin and lactoferricin exert antitumor activities on human colorectal cancer cells(HT-29) by activating various signaling pathways. Biochem Cell Biol. 2017 Feb;95(1):99-109. [3]. Latorre D, et al. Reciprocal interactions between lactoferrin and bacterial endotoxins and their role in the regulation of the immune response. Toxins (Basel). 2010;2(1):54-68.

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