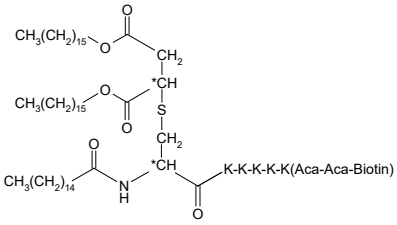
Product Information
Lipobiotin

For Research Purposes only. Not for use in Humans

Product	L2070
Chemical name	S-(1,2-dicarboxyhexadecyl)ethyl-N-palmitoyl-(*R*)-cysteinyl-(*S*)-lysyl-(*S*)-lysyl-(*S*)-lysyl-(*S*)-lysyl-(*S*)-lysine(biotinyl-ε-aminocaproyl-ε- aminocaproic acid) x 2 CF_3COOH
Synonyms	PHC-KKKKK(Biotin-Aca-Aca) PHC-$(Lys)_4$-Lys(Biotin-Aca-Aca) x 3 TFA
CAS	Not available
MW / Formula	2018 • 342.1 / $C_{107}H_{201}N_{15}O_{16}S_2$
Lot No.	B17
Vial content	10 mg
Description	 Lipobiotin is a selectively biotinylated analogue of PHC-SKKKK (product code L2032). Biotin is attached via spacer molecules to the side chain of the C-terminal lysine. The Biotin-avidin or -streptavidin interaction can be used for detection, labelling or immobilisation in many research applications. Lipobiotin is no ligand of TLR. Lipobiotin was used in a novel, rapid and versatile method for the isolation of pathogen-containing organelles from primary cells. The compound was used to functionalize bacterial surfaces and allows the rapid immunomagnetic isolation of intact bacteria-containing compartments and apoptotic blebs which can be characterized by electron microscopy, western blot and mass spectrometry [1, 2]. The procedure facilitates the detailed molecular characterization of pathogen-containing phagosomes in low total cell number of macrophages and other host cells [1].
Packaging Reconstitution Storage	The lipobiotin is provided as a lyophilised, colourless powder without any additives. It can be shipped at room temperature and should be stored at 4°C. Lipobiotin can be reconstituted in endotoxin-free water (1 mg/ml stock solution). Through the use of either a homogeniser or sonicator, a homogenous solution or emulsion can be prepared. If you use an ultrasonic bath, take care of the vial labels. For further dilutions water, saline, buffer (pH ≤ 7.4) or media can be used. After reconstitution, the solution should be aliquoted and stored at or below –20°C. Repeated thawing and freezing should be avoided.
Handling	Good laboratory technique should be employed in the safe handling of any lipopeptide product. If you are not fully trained or are unaware of the hazards involved, do not use this compound! Caution: Do not take internally! Avoid contact by all modes of exposure. Wear appropriate laboratory attire including a lab coat, gloves, mask and safety glasses. Do not mouth pipette, inhale, ingest or allow coming into contact with open wounds. Wash thoroughly any area of the body which comes into contact with the product. Avoid accidental autoinoculation by exercising extreme care when handling in conjunction with any injection device. This product is intended for research purposes by qualified personnel only. It is not intended for use in humans or as a diagnostic agent. EMC microcollections GmbH is not liable for any damages resulting from misuse or handling of this product.

References

[1] C. Steinhäuser, U. Heigl, V. Tchikov, J. Schwarz, T. Gutsmann, K. Seeger, J. Brandenburg, J. Fritsch, J. Schroeder, K.-H. Wiesmüller, I. Rosenkrands, P. Walther, J. Pott, E. Krause, S. Ehlers, W. Schneider-Brachert, S. Schütze, N. Reiling (2013) Lipid-labeling facilitates a novel magnetic isolation procedure to characterize pathogen-containing phagosomes. Traffic 14(3), 321-336. doi: 10.1111/tra.12031.

[2] C. Steinhäuser, T. Dallenga, V. Tchikov, U. E. Schaible, S. Schütze, N. Reiling (2014) Immuno-magnetic isolation of pathogen-containing phagosomes and apoptotic blebs from primary phagocytes. Curr. Protoc. Immunol., In press