

Pam3CSK4 Biotin

Biotin-labeled Pam3CSK4 - TLR1/2 ligand

Catalog # tlr1-bpms

For research use only

Version # 11C22-MM

PRODUCT INFORMATION

Content:

- 50 µg Pam3CSK4 Biotin
- 1.5 ml endotoxin-free water

Storage and stability:

- Pam3CSK4 Biotin is provided lyophilized and shipped at room temperature. Store at 4°C. Protect from light.
- Upon resuspension, prepare aliquots of Pam3CSK4 Biotin and store at 4°C for short term storage or -20°C for long storage. Protect from light.
- Resuspended product is stable 1 month at 4°C and 6 months at -20°C when properly stored.

DESCRIPTION

Bacterial lipoproteins are a family of proinflammatory cell wall components found in both Gram positive and Gram negative bacteria. The stimulatory activity of bacterial lipoproteins resides in their acylated amino terminus. Pam3CSK4 is a synthetic tripalmitoylated lipopeptide that mimicks the acylated amino terminus of bacterial lipoproteins. Pam3CysSerLys4 (Pam3CSK4) is a potent activator of the proinflammatory transcription factor NF-κB¹. Recognition of Pam3CSK4 is mediated by TLR2 which cooperates with TLR1 through their cytoplasmic domain to induce the signaling cascade leading to the activation of NF-κB³.

1. Aliprantis AO *et al.*, 1999. Cell activation and apoptosis by bacterial lipoproteins through toll-like receptor-2. *Science*.285(5428):736-9.

2. Ozinsky A. *et al.*, 2000. The repertoire for pattern recognition of pathogens by the innate immune system is defined by cooperation between toll-like receptors. *PNAS*. 97(25):13766-71.

CHEMICAL PROPERTIES

Synonym: P₃C-SK4(Aca-Aca-Biotin) x 2TFA

Formula: C₁₀₃H₁₉₂N₁₄O₁₇S₂, 2 TFA

Molecular weight: 1962.9

Working concentration: 10 - 300 ng/ml

METHODS

Preparation of stock solution (100 µg/ml)

- Add 500 µl endotoxin-free water (provided) and vortex for 30 seconds or until complete solubilization.
- Prepare further dilutions by adding the appropriate amount of endotoxin-free water.

APPLICATIONS

Pam3CSK4 Biotin can be used for various applications, such as evaluating cellular uptake and localization of Pam3CSK4 using a biotin detection system and light microscopy.

RELATED PRODUCTS

Product	Catalog Code
Pam3CSK4	tlr1-pms
293/hTLR1/2	293-htlr1/2
293/mTLR1/2	293-mtlr1/2
293/hTLR2	293-htlr2
293/mTLR2	293-mtlr2

TECHNICAL SUPPORT

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