

Product Name: Pam2CSK4

Catalog No.: 4637

Batch No.: 9

CAS Number: 868247-72-7

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₆₅H₁₂₆N₁₀O₁₂S
Batch Molecular Weight: 1271.83
Physical Appearance: White lyophilised solid
Counter Ion: TFA
Solubility: Soluble to 1 mg/ml in 0.25% acetic acid
Storage: Store at -20°C
Peptide Sequence: Cys(Pam₂)-Ser-Lys-Lys-Lys-Lys

2. ANALYTICAL DATA

HPLC: Shows 95.3% purity
Mass Spectrum: Consistent with structure

3. AMINO ACID ANALYSIS DATA

Amino Acid Theoretical		Actual		Amino Acid Theoretical		Actual	
Ala				Lys	4.00		3.97
Arg				Met			
Asx				Phe			
Cys	1.00	Detected		Pro			
Glx				Ser	1.00		1.04
Gly				Thr			
His				Trp			
Ile				Tyr			
Leu				Val			

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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CAS Number: 868247-72-7

Description:

Pam2CSK4 is a toll-like receptor 2/6 (TLR2/6) agonist. Induces TNF- α production in human mononuclear cells. Also induces proliferation and activation of mouse splenic B cells.

Physical and Chemical Properties:

Batch Molecular Formula: C₆₅H₁₂₆N₁₀O₁₂S

Batch Molecular Weight: 1271.83

Physical Appearance: White lyophilised solid

Peptide Sequence:

Cys(Pam₂)-Ser-Lys-Lys-Lys-Lys

Storage: Store at -20°C

Solubility & Usage Info:

Soluble to 1 mg/ml in 0.25% acetic acid

This product is supplied as a lyophilized solid and may be very hard to visualize. Solutions should be made by adding solvent directly to the vial. The vial should then be vortexed vigorously to ensure the product has completely dissolved.

Counter Ion: TFA

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Peptides in solution are much less stable than in lyophilized form. This is especially true for peptides whose sequences contain amino acids such as Cys, Met, Trp, Asn, Gln, and N-terminal Glu.

Therefore we recommend storing peptides in solution for as short a time as possible. Avoid repeated freeze thaw cycles by dividing the peptide solution into aliquots and storing the aliquots at -20°C. Any portion of an aliquot unused after thawing should be discarded.

Peptides stored in solution can occasionally be susceptible to bacterial degradation. We recommend using sterile solutions or passing the peptide solution through a 0.2 μ m filter to remove potential bacterial contamination whenever possible.

References:

Boeglin *et al* (2011) Toll-like receptor agonists synergize with CD40L to induce either proliferation or plasma cell differentiation of mouse B cells. *PLoS One* **6** e25542. PMID: 21991317.

Schrohm *et al* (2007) Physicochemical and biological analysis of synthetic bacterial lipopeptides: validity of the concept of endotoxic conformation. *J.Biol.Chem.* **282** 11030. PMID: 17308304.

Omueti *et al* (2005) Domain exchange between human Toll-like receptors 1 and 6 reveals a region required for lipopeptide discrimination. *J.Biol.Chem.* **280** 36616. PMID: 16129684.

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bio-techne.com

info@bio-techne.com

techsupport@bio-techne.com

North America

Tel: (800) 343 7475

China

info.cn@bio-techne.com

Tel: +86 (21) 52380373

Europe Middle East Africa

Tel: +44 (0)1235 529449

Rest of World

www.tocris.com/distributors

Tel:+1 612 379 2956