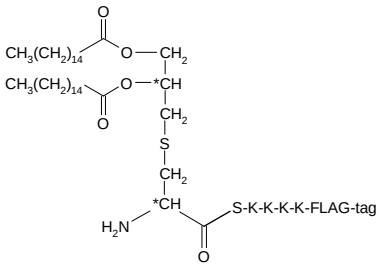
Product Information
Pam_2Cys-SKKKK-FLAG-tag

For Research Purposes only. Not for use in Humans

Product	L20229
Chemical name	S-[2,3-bis(palmitoyloxy)-(2*RS*)-propyl]-(*R*)-cysteinyl-Ser-Lys-Lys-Lys-Lys-Asp-Tyr-Lys-Asp-Asp-Asp-Asp-Lys
Synonyms	P_2C-SKKKKDYKDDDDK Pam_2Cys-Ser-Lys-Lys-Lys-Lys-Asp-Tyr-Lys-Asp-Asp-Asp-Asp-Lys
MW / Formula	2266.8 / $C_{106}H_{184}N_{20}O_{31}S$

Description



In Pam_2Cys-SKKKK-FLAG-tag the FLAG-tag DYKDDDDK is covalently bound to the C-terminus of the peptide moiety of the TLR2 ligand Pam_2Cys-SKKKK (product code L2020). The FLAG-tagged compound Pam_2Cys-SKKKK-FLAG-tag can be used in many different applications, which require recognition by an antibody or detection via labelled anti-FLAG-antibodies. Pam_3Cys-SKKKK-FLAG-tag (product code L2064) has been used successfully with FRET and FRAP imaging techniques to study molecular associations of the lipopeptide with TLR1 and TLR2 (see Manukyan et al. 2005).
Lipopeptides are valuable tools for basic research in innate and acquired immunity. The synthetic lipopeptide Pam_2Cys-SKKKK is described to elicit cellular responses through TLR2 which involves downstream NF-κB activation and cytokine release. Synthetic Pam_2Cys-SKKKK is based on the structure of the diacylated N-terminus of mycoplasma lipoproteins and carries two ester bound fatty acids and a free amino terminus.
The crystal structure of the TLR2/TLR6 heterodimers with the synthetic ligand *R*-Pam_2Cys-SKKKK (*RR*-stereoisomer, product code L20201) has been elucidated.

Packaging
Reconstitution
Storage

The FLAG-tagged lipopeptide is provided as a lyophilised, colourless powder without any additives. It can be shipped at room temperature and should be stored at 4°C.
Pam_2Cys-SKKKK-FLAG-tag 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. For further dilutions water, saline, buffer 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.

References

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