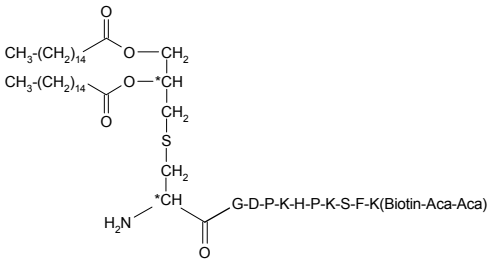
Product Information
FSL-1-Biotin

For Research Purposes only. Not for use in Humans

Product	L7030
Chemical name	S-[2,3-bis(palmitoyloxy)-(2*RS*)-propyl]-(*R*)-cysteinyl-GDPKHPKSFK(biotinyl-ε-aminocaproyl-ε-aminocaproic acid)
Synonyms	Pam_2Cys-GDPKHPKSFK(Biotin-Aca-Aca); Biotinylated Fibroblast-stimulating Lipopeptide
CAS	Not available
MW / Formula	2247 / $C_{112}H_{188}N_{20}O_{23}S_2$

Description



FSL-1-Biotin is a selectively biotinylated analogue of FSL-1 (product code L7000). It is labelled via the side chain of an additional C-terminal lysine. Biotin has a strong affinity for avidin or streptavidin. This interaction can be used for detection, labelling or immobilisation in many research applications.

Lipopeptides are valuable tools for basic research in innate and acquired immunity. The synthetic lipopeptide FSL-1 represents the N-terminal sequence of the 44-kDa lipoprotein LP44 of *Mycoplasma salivarium*. It carries two ester bound fatty acids and a free amino terminus. The synthetic lipopeptide FSL-1 is described to elicit cellular responses through TLR2/TLR6 heterodimers which involves downstream NF-κB activation and cytokine release.

The water soluble FSL-1 showed high activity when tested for its capability to activate THP-1 cells to produce TNF-α and on HEK293 cells transfected with TLR2 and TLR6 to produce NF-κB.

Packaging
Reconstitution
Storage

The 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.

FSL-1-Biotin 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.

Depending on the sensitivity of the *in vitro* assay, the recommended working concentration for specific stimulation of innate immunity via TLR2/TLR6 heterodimers is 10 – 100 nM (0.015 – 0.15 µg/ml).

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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