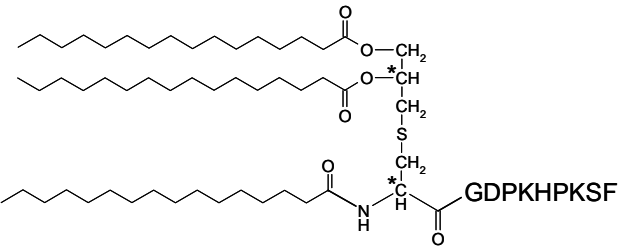


# Product Information

## Pam<sub>3</sub>Cys-GDPKHPKSF

For Research Purposes only. Not for use in Humans



|   |  |         |        |        |               |                          |  |                   |        |        |
|---|--|---------|--------|--------|---------------|--------------------------|--|-------------------|--------|--------|
| <b>Product</b>                                  | XS15   |         |        |        |               |                          |  |                   |        |        |
| <b>Chemical name</b>                            | N-Palmitoyl-S-[2,3-bis(palmitoyloxy)-(2R)-propyl]-(R)-cysteiny-GDPKHPKSF   |         |        |        |               |                          |  |                   |        |        |
| <b>CAS</b>                                      | Not available  |         |        |        |               |                          |  |                   |        |        |
| <b>MW / Formula</b>                             | 1919.7 / C <sub>101</sub> H <sub>173</sub> N <sub>14</sub> O <sub>19</sub> S   |         |        |        |               |                          |  |                   |        |        |
| <b>Lot No.</b>                                  | X921   |         |        |        |               |                          |  |                   |        |        |
| <b>Vial content</b>                             | 1 mg   |         |        |        |               |                          |  |                   |        |        |
| <b>Description</b>                              |  <p>The adjuvant XS15 is a water-soluble TLR2/TLR1 ligand inducing strong CD8 and T<sub>H</sub>1 CD4 response against <b>free short peptides</b> emulsified in Montanide™ ISA 51 after a single s.c. injection. It was shown that the granuloma induced by injection of a mixture of short synthetic peptides and Montanide™ shows high concentration of functional antigen specific T cells that produce IFN<sub>γ</sub>, TNF, and IL2, CD8 cells also produce CD107a, but no IL10 [1]. High frequencies of antigen specific T cell were also found in the peripheral blood.</p>   |         |        |        |               |                          |  |                   |        |        |
| <b>Packaging<br/>Reconstitution<br/>Storage</b> | <p>The lipopeptide is provided as a endotoxin-free, lyophilised, colourless powder without any additives. It can be shipped at room temperature and the lyophilized powder should be stored at 4°C.</p> <p>XS15 can be reconstituted in endotoxin-free water (1 mg/ml stock solution). Through the use of either a homogeniser or sonicator, a homogenous solution can be prepared. For the purpose of dissolution temperature up to 50 °C is accepted.</p> <p>After reconstitution, the solution should be aliquoted and stored at or below –20°C. Repeated thawing and freezing should be avoided.</p> <p>XS15 is available in two packing sizes: 1 mg and 5 mg.</p>   |         |        |        |               |                          |  |                   |        |        |
| <b>Application</b>                              | <p>XS15 is recommended for immunisation in combination with Montanide™ ISA 51 (Seppic SEPPIC GmbH, Köln, Germany) [2] to generate a strong immune response against free short peptides.</p> <p><b>Application:</b></p> <p><b>Recommendations for immunising mice</b></p> <table border="1"> <tr> <td>Antigen</td> <td>300 µg</td> <td>100 µl</td> </tr> <tr> <td>Adjuvant XS15</td> <td>50 µg (1 mg/ml solution)</td> <td></td> </tr> <tr> <td>Montanide™ ISA 51</td> <td>100 µl</td> <td>100 µl</td> </tr> </table> <p><b>Immunisation regimen:</b></p> <ul style="list-style-type: none"> <li>Reconstitute the vial containing XS15 in sterile, endotoxin-free water (1mg/ml).</li> <li>Mix the required amounts of XS15 with your antigen. Total volume XS15 + antigen 100 µl.</li> <li>Prepare the emulsion with 100 µl Montanide™ ISA 51 according to manufacturer's SOP. Total volume 200 µl.</li> <li>It is easier to prepare a higher volume (1-2 ml) even if only 0.2 ml is injected.</li> </ul> <p><b>Recommended mode of administration</b></p> <p>immunisation of mice: subcutaneous, primary immunisation followed by two booster</p> | Antigen | 300 µg | 100 µl | Adjuvant XS15 | 50 µg (1 mg/ml solution) |  | Montanide™ ISA 51 | 100 µl | 100 µl |
| Antigen   | 300 µg   | 100 µl  |        |        |               |                          |  |                   |        |        |
| Adjuvant XS15                                   | 50 µg (1 mg/ml solution)   |         |        |        |               |                          |  |                   |        |        |
| Montanide™ ISA 51                               | 100 µl   | 100 µl  |        |        |               |                          |  |                   |        |        |

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### 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] H.G. Rammensee et al. (2016) A new synthetic lipopeptide is a superior adjuvant for peptide vaccination. Poster presented at the 14<sup>th</sup> annual meeting of the association for cancer immunotherapy CIMT, Mainz, Germany May 10-12.
- [2] Ascarateil et al.: (2015) Safety data of Montanide ISA 51 VG and Montanide ISA 720 VG, two adjuvants dedicated to human therapeutic vaccines. Journal for ImmunoTherapy of Cancer 3(Suppl 2):P428.