

# PRODUCT INFORMATION



## Acetyl Octapeptide-3

Item No. 27260

CAS Registry No.: 868844-74-0

Formal Name: N-acetyl-L- $\alpha$ -glutamyl-L- $\alpha$ -glutamyl-L-methionyl-L-glutamyl-L-arginyl-L-arginyl-L-alanyl-L- $\alpha$ -asparagine

MF:  $C_{41}H_{70}N_{16}O_{16}S$

Ac—Glu—Glu—Met—Gln—Arg—Arg—Ala—Asp—NH<sub>2</sub>

FW: 1,075.2

Purity:  $\geq 98\%$

Supplied as: A solid

Storage:  $-20^{\circ}\text{C}$

Stability:  $\geq 4$  years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

Acetyl octapeptide-3 is supplied as a solid. A stock solution may be made by dissolving the acetyl octapeptide-3 in the solvent of choice, which should be purged with an inert gas. Acetyl octapeptide-3 is soluble in the organic solvent DMSO at a concentration of approximately 10 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of acetyl octapeptide-3 can be prepared by directly dissolving the solid in aqueous buffers. The solubility of acetyl octapeptide-3 in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

Acetyl octapeptide-3 is a cosmeceutical peptide.<sup>1</sup> Acetyl octapeptide-3 co-polymerizes with polyoxometalates (PMs) to form a peptide-PM assembly that can adhere to wet solid materials underwater with greater shear strength than fibrin glue.<sup>2</sup>

### References

1. Puche, J.C., Domenech, N.A., and Gonzalez, R.D. Skin antiaging treatment. *LIPOTEC S.A. US2013/0078295A1* (2013).
2. Xu, J., Li, X., Li, X., et al. Supramolecular copolymerization of short peptides and polyoxometalates: Toward the fabrication of underwater adhesives. *Biomacromolecules* **18(11)**, 3524-3530 (2017).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

#### WARRANTY AND LIMITATION OF REMEDY

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