# PRODUCT INFORMATION



## Acetyl Tetrapeptide-3

Item No. 27151

CAS Registry No.: 827306-88-7

Formal Name: N<sup>2</sup>-acetyl-L-lysylglycyl-L-histidyl-L-

lysinamide

≥4 years

MF:  $C_{22}H_{39}N_9O_5$ FW: 509.6 **Purity:** ≥95% Supplied as: A solid Storage: -20°C

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

### **Laboratory Procedures**

Stability:

Acetyl tetrapeptide-3 is supplied as a solid. A stock solution may be made by dissolving the acetyl tetrapeptide-3 in the solvent of choice, which should be purged with an inert gas. Acetyl tetrapeptide-3 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). It is also soluble in water. The solubility of acetyl tetrapeptide-3 in ethanol, DMSO, and water is approximately 10 mg/ml and approximately 14 mg/ml in DMF.

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 tetrapeptide-3 can be prepared by directly dissolving the solid in aqueous buffers. The solubility of acetyl tetrapeptide-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 tetrapeptide-3 is a biomimetic peptide. It increases protein levels of type III collagen and total laminins in MRC5 human fibroblasts when used at a concentration of 1 µM. Acetyl tetrapeptide-3 reverses corticoid-induced decreases in collagen VII expression at the dermal-epidermal junction in human skin explants.

#### Reference

1. Loing, E., Lachance, R., Ollier, V., et al. A new strategy to modulate alopecia using a combination of two specific and unique ingredients. J. Cosmet Sci. 64(1), 45-58 (2013).

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

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.

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