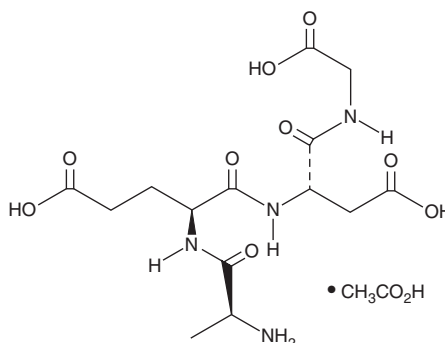


PRODUCT INFORMATION

Epitalon (acetate)

Item No. 27463

CAS Registry No.: 307297-40-1
Formal Name: L-alanyl-L-α-glutamyl-L-α-aspartyl-glycine, monoacetate
Synonym: Epithalone
MF: C₁₄H₂₂N₄O₉ • C₂H₄O₂
FW: 450.4
Purity: ≥95%
Supplied as: A solid
Storage: -20°C
Stability: ≥2 years



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

Laboratory Procedures

Epitalon (acetate) is supplied as a solid. A stock solution may be made by dissolving the epitalon (acetate) in the solvent of choice. Epitalon (acetate) is soluble in organic solvents such as DMSO and dimethyl formamide, which should be purged with an inert gas. The solubility of epitalon (acetate) in these solvents is approximately 3 and 1 mg/ml, respectively.

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 epitalon (acetate) can be prepared by directly dissolving the solid in aqueous buffers. The solubility of epitalon (acetate) in PBS, pH 7.2, is approximately 5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Epitalon is a synthetic tetrapeptide with anti-aging properties.¹⁻⁴ Dietary administration of epitalon (0.00001% w/w) reduces levels of lipid peroxidation products in aged *D. melanogaster* tissue homogenates.¹ Epitalon (1 µg/animal) delays age-related estrous shutdown and decreases the frequency of bone marrow cell chromosomal aberrations in female mice.² It decreases spontaneous mammary gland and ovarian tumor development and metastasis in aged female mice.³ Epitalon also stimulates melatonin synthesis and normalizes the circadian rhythm of cortisol secretion in senescent female *M. mulatta* monkeys.⁴

References

1. Khavinson, V.K. and Myl'nikov, S.V. Effect of epithalone on the age-specific changes in the time course of lipid peroxidation in *Drosophila melanogaster*. *Bull. Exp. Biol. Med.* **130(11)**, 1116-1119 (2000).
2. Anisimov, V.N., Khavinson, V.K., Popovich, I.G., et al. Effect of Epitalon on biomarkers of aging, life span and spontaneous tumor incidence in female Swiss-derived SHR mice. *Biogerontology* **4(4)**, 193-202 (2003).
3. Kossoy, G., Anisimov, V.N., Ben-Hur, H., et al. Effect of the synthetic pineal peptide epitalon on spontaneous carcinogenesis in female C3H/He mice. *In Vivo* **20(2)**, 253-257 (2006).
4. Khavinson, V., Goncharova, N., and Lapin, B. Synthetic tetrapeptide epitalon restores disturbed neuroendocrine regulation in senescent monkeys. *Neuro. Endocrinol. Lett.* **22(4)**, 251-254 (2001).

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.

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