

Epitalon

Chemical Properties

CAS No. : 307297-39-8

Formula: C₁₄H₂₂N₄O₉

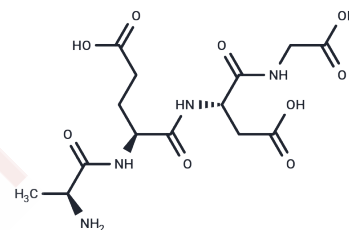
Molecular Weight: 390.35

Keep away from moisture, Keep away from direct sunlight

Storage:

Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Actual storage temperature shall be subject to the COA.



Biological Description

Description	Epithalon (Epitalon, Epithalone) is the synthetic form of the pineal gland-derived polypeptide epithalamin.
Targets(IC50)	Telomerase
In vitro	Epitalon (0.1, 0.2, 0.5 to 1 µg/ml, 4 days) dose-dependently increased telomere length in 21NT and BT474 breast cancer cells [1].
In vivo	Epitalon (30-40 microg/kg, intravenous injection, administered for 5 consecutive days per month) did not affect food consumption, body weight, or average lifespan in mice; however, it delayed age-related decline in estrous function and reduced the rate of chromosomal aberrations in bone marrow cells (a decrease of 17.1%, P<0.05) [2].

Solubility Information

Solubility	H ₂ O: ≥ 40 mg/mL, Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.5618 mL	12.809 mL	25.618 mL
5 mM	0.5124 mL	2.5618 mL	5.1236 mL
10 mM	0.2562 mL	1.2809 mL	2.5618 mL
50 mM	0.0512 mL	0.2562 mL	0.5124 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

- Al-Dulaimi S, et al. Epitalon increases telomere length in human cell lines through telomerase upregulation or ALT activity. *Biogerontology*. 2025 Sep 4;26(5):178.
- Anisimov VN, et al. Effect of Epitalon on biomarkers of aging, life span and spontaneous tumor incidence in female Swiss-derived SHR mice. *Biogerontology*. 2003;4(4):193-202.
- Khavinson VKh, et al. Epithalon peptide induces telomerase activity and telomere elongation in human somatic cells. *Bull Exp Biol Med*. 2003 Jun;135(6):590-2.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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