

Product Data Sheet

Product Name: Pinealon

Cat. No.: GC74371

Chemical Properties

Cas. No. 175175-23-2

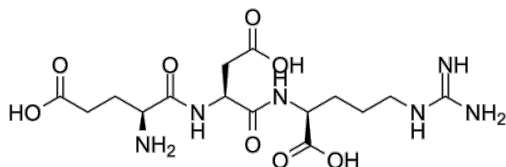
Formula $C_{15}H_{26}N_6O_8$ M.Wt 418.4

Solubility H_2O : 40 mg/mL (95.60 mM; Need ultrasonic and warming) Storage Sealed storage, away from moisture

General tips For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

Structure



Background

Pinealon is a 3-amino acid peptide and shows neuroprotective properties. Pinealon prevents reactive oxygen species (ROS) accumulation and suppresses the activation of ERK 1/2. Pinealon stimulates the functional activity of the main cellular elements of brain tissue, reduces the level of spontaneous cell death. Pinealon protects the rat offspring from prenatal perhomocysteinemia.

Pinealon (10, 50, 100 nM; 30 min) in a dose-dependent manner prevents an increase in the ROS accumulation induced by ouabain in cerebellar granule cells[1]. Pinealon (10 nM; 0, 2.5, 5, 10, 20, 30

Caution: Product has not been fully validated for medical applications. For research use only.

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min) suppresses the activation of ERK 1/2 in rat cerebellar granule cells exposed to 500 mM homocysteine (HC)[1].

Pinealon (50, 100, 200 ng/kg; Injection, for 5 days) shows a dose-dependent effect on the maintenance of a previously acquired skill in rats[2]. Pinealon (10 µg/kg; daily for 5 days) protects the rat offspring from prenatal perhomocysteinemia[3].

References:

- [1]. Khavinson V, et al. Pinealon increases cell viability by suppression of free radical levels and activating proliferative processes. *Rejuvenation Res.* 2011 Oct;14(5):535-41.
- [2]. G. V. Karantysh, et al. Effect of Pinealon on Learning and Expression of NMDA Receptor Subunit Genes in the Hippocampus of Rats with Experimental Diabetes. *Neurochemical Journal*, 2020, 14, 314-320.
- [3]. Arutjunyan A, et al. Pinealon protects the rat offspring from prenatal perhomocysteinemia. *Int J Clin Exp Med.* 2012;5(2):179-85.

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