

## Lamprey LH-RH I

|                      |   |
|----------------------|---|
| Cat. No.:            | HY-P3673  |
| CAS No.:             | 102634-23-1   |
| Molecular Formula:   | C <sub>58</sub> H <sub>79</sub> N <sub>15</sub> O <sub>15</sub>                           |
| Molecular Weight:    | 1226.34   |
| Sequence Shortening: | {Glp}-HYSLEWKPG-NH2   |
| Target:              | GnRH Receptor   |
| Pathway:             | GPCR/G Protein  |
| Storage:             | Please store the product under the recommended conditions in the Certificate of Analysis. |

### BIOLOGICAL ACTIVITY

|                    |   |               |  |         |  |                 |   |         |  |
|--------------------|---|---------------|--|---------|--|-----------------|---|---------|--|
| <b>Description</b> | Lamprey LH-RH I is a gonadotropin-releasing hormone, elevates plasma steroid levels and stimulates ovulation in the lamprey without biological activity in other animal models <sup>[1]</sup> .   |               |  |         |  |                 |   |         |  |
| <b>In Vitro</b>    | <p><b>Caution: Product has not been fully validated for medical applications. For research use only.</b></p> <p>Lamprey LH-RH I has a primary mechanism of transport to the pituitary is simple diffusion from neuronal terminals in the neurohypophysis to the adenohypophysis. An additional route is via secretion into the third ventricle and transport by tanycytes to the adenohypophysis.</p> <p><small>Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com<br/>Address: 1 Door Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA</small></p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>   |               |  |         |  |                 |   |         |  |
| <b>In Vivo</b>     | <p>Lamprey LH-RH I (5-200 µg/kg; i.p.; single dose or twice) elevates plasma steroid levels and stimulates lamprey ovulation<sup>[1]</sup>. MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <table border="1"> <tr> <td>Animal Model:</td> <td>Female sea-run sea lampreys<sup>[1]</sup></td> </tr> <tr> <td>Dosage:</td> <td>5 µg/kg, 50 µg/kg, 100 µg/kg, 200 µg/kg; dissolved in 0.6% NaCl in distilled water</td> </tr> <tr> <td>Administration:</td> <td>Intraperitoneal injection; single dose or twice; observed for 30 days</td> </tr> <tr> <td>Result:</td> <td>Significantly increased estradiol in a dose-related manner. Resulted 80% of the lampreys ovulation at 200 or 100 µg/kg compared in a doserelated manner.</td> </tr> </table> | Animal Model: | Female sea-run sea lampreys <sup>[1]</sup> | Dosage: | 5 µg/kg, 50 µg/kg, 100 µg/kg, 200 µg/kg; dissolved in 0.6% NaCl in distilled water | Administration: | Intraperitoneal injection; single dose or twice; observed for 30 days | Result: | Significantly increased estradiol in a dose-related manner. Resulted 80% of the lampreys ovulation at 200 or 100 µg/kg compared in a doserelated manner. |
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| Result:            | Significantly increased estradiol in a dose-related manner. Resulted 80% of the lampreys ovulation at 200 or 100 µg/kg compared in a doserelated manner.  |               |  |         |  |                 |   |         |  |

### REFERENCES

- [1]. Sower SA, et al. Comparative biological properties of lamprey gonadotropin-releasing hormone in vertebrates. *Endocrinology*. 1987 Feb;120(2):773-9.
- [2]. King JC, et al. Neuronal systems immunoreactive with antiserum to lamprey gonadotropin-releasing hormone in the brain of *Petromyzon marinus*. *Cell Tissue Res*. 1988 Jul;253(1):1-8.