

Acyline

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| Cat. No.: | HY-16027 |
| CAS No.: | 170157-13-8 |
| Molecular Formula: | C ₈₀ H ₁₀₂ ClN ₁₅ O ₁₄ |
| Molecular Weight: | 1533.21 |
| Target: | GnRH Receptor |
| Pathway: | GPCR/G Protein |
| Storage: | Please store the product under the recommended conditions in the Certificate of Analysis. |

BIOLOGICAL ACTIVITY

| Description | Acyline, a GnRH peptide analogue, is a GnRH antagonist that inhibits gonadotropin and testosterone (T) levels ^[1] . | | | | | | | | |
|-----------------|---|---------------|--|---------|------------------------|-----------------|---|---------|---|
| In Vivo | <p>Acyline (50 µg, s.c., twice daily, 5 days) can result in disruption of vaginal oestrus and reduce uterine weights in female Kiss1^{-/-} and Gpr54^{-/-} mice, as well as a decrease in LH concentrations of female Kiss1^{-/-} mice^[1].</p> <p>Acyline (50 µg, s.c., once) can reduce FSH concentrations from pre-acyline 1.51 ng/mL to post-acyline 1.27 ng/mL in male Kiss1^{-/-} mice and from pre-acyline 2.87 ng/mL to post-acyline 1.95 ng/mL in male Gpr54^{-/-} mice^[1].</p> <p>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 Kiss1^{-/-} and Gpr54^{-/-} mice^[1]</td> </tr> <tr> <td>Dosage:</td> <td>50 µg (1 mg/mL in PBS)</td> </tr> <tr> <td>Administration:</td> <td>Subcutaneous injection; twice daily; 5 days</td> </tr> <tr> <td>Result:</td> <td> <p>12 Kiss1^{-/-} mice left oestrus within 4 days of 13 mice received acyline while only 2 of 17 mice received vehicle left oestrus. Also, 7 of 8 Gpr54^{-/-} mice received acyline left oestrus compared to 1 of 7 received vehicle.</p> <p>Reduced uterine weights of Kiss1^{-/-} and Gpr54^{-/-} mice in treated group compared to the vehicle group, and reduced serum LH concentrations in Kiss1^{-/-} mice.</p> </td> </tr> </table> | Animal Model: | Female Kiss1 ^{-/-} and Gpr54 ^{-/-} mice ^[1] | Dosage: | 50 µg (1 mg/mL in PBS) | Administration: | Subcutaneous injection; twice daily; 5 days | Result: | <p>12 Kiss1^{-/-} mice left oestrus within 4 days of 13 mice received acyline while only 2 of 17 mice received vehicle left oestrus. Also, 7 of 8 Gpr54^{-/-} mice received acyline left oestrus compared to 1 of 7 received vehicle.</p> <p>Reduced uterine weights of Kiss1^{-/-} and Gpr54^{-/-} mice in treated group compared to the vehicle group, and reduced serum LH concentrations in Kiss1^{-/-} mice.</p> |
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REFERENCES

[1]. Y M Chan, et al. Kisspeptin/Gpr54-independent gonadotrophin-releasing hormone activity in Kiss1 and Gpr54 mutant mice. J Neuroendocrinol. 2009 Dec;21(12):1015-23.

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

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