## Alphadolone acetate

MedChemExpress

| Cat. No.:          | HY-108068                                      |       |          |
|--------------------|--|-------|----------|
| CAS No.:           | 23930-37-2                                     |       |          |
| Molecular Formula: | C <sub>23</sub> H <sub>34</sub> O <sub>5</sub> |       |          |
| Molecular Weight:  | 390.51   |       |          |
| Target:            | Others   |       |          |
| Pathway:           | Others   |       |          |
| Storage:           | Powder   | -20°C | 3 years  |
|                    |  | 4°C   | 2 years  |
|                    | In solvent                                     | -80°C | 6 months |
|                    |  | -20°C | 1 month  |
|                    |  |       |          |

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## SOLVENT & SOLUBILITY

|  | Solvent Mass<br>Concentration | 1 mg      | 5 mg      | 10 mg      |            |
|--|-------------------------------|-----------|-----------|------------|------------|
|  | Preparing<br>Stock Solutions  | 1 mM      | 2.5608 mL | 12.8038 mL | 25.6075 mL |
|  | 5 mM                          | 0.5122 mL | 2.5608 mL | 5.1215 mL  |            |
|  | 10 mM                         | 0.2561 mL | 1.2804 mL | 2.5608 mL  |            |

| <b>BIOLOGICAL ACT</b> | Ινιτγ  |  |  |  |
|-----------------------|--|--|--|--|
| Description           | Alphadolone acetate (Alfa                                      | dolone acetate) is a steroid anaesthetic, with antinociception <sup>[1]</sup> .  |  |  |
| In Vivo               | stimulated luteinizing hom<br>[2]<br>Alphadolone acetate (14 m | Alphadolone acetate (anaesthetized with a 3:1 mixture of Alphaxalone and Alphadolone acetate; i.m.) blocks the oestrogen-<br>stimulated luteinizing hormone (LH) surge and impairs pulsatile secretion in female rats, when combined with alphaxalonet<br>[2].<br>Alphadolone acetate (14 mL/kg; i.p.; single dosage) decreases serum concentrations of LH in castrated rats <sup>[3]</sup> .<br>MCE has not independently confirmed the accuracy of these methods. They are for reference only. |  |  |
|                       | Animal Model:  | Inbred Wistar-derived colony female rats (intramuscularly injected with 20 $\mu g/100g$ oestradiol benzoate) $^{[2]}$  |  |  |
|                       | Dosage:  | Anaesthetized with a 3 :1 mixture of Alphaxalone and Alphadolone acetate   |  |  |
|                       | Administration:  | i.m.   |  |  |

## **Product** Data Sheet

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| Result:         | Blocked the oestrogen-stimulated LH surge and impairs pulsatile secretion.                        |
|-----------------|---|
| Animal Model:   | Male Sprague-Dawley rats (orchidectomized; aged 90-120 days and weighing 300-350 g) <sup>[2</sup> |
| Dosage:         | 14 mL/kg  |
| Administration: | i.p.; single dosage   |
| Result:         | Decreased serum concentrations of LH.   |

## REFERENCES

[1]. Nadeson R, et al. Antinociceptive properties of neurosteroids II. Experiments with Saffan and its components alphaxalone and alphadolone to reveal separation of anaesthetic and antinociceptive effects and the involvement of spinal cord GABA(A) receptors. Pain. 2000 Oct;88(1):31-39.

[2]. Dyer RG, Mansfield S. Anaesthesia with alphaxalone plus alphadolone acetate blocks the oestrogen-stimulated LH surge and impairs pulsatile LH secretion in ovariectomized female rats. J Endocrinol. 1984 Jul;102(1):27-31.

[3]. Emanuele MA, et al. Anaesthesia with alphaxalone plus alphadolone acetate decreases serum concentrations of LH in castrated rats. J Endocrinol. 1987 Nov;115(2):221-3.

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