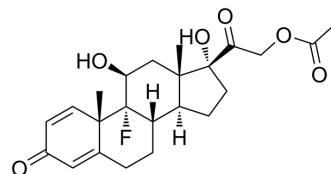


## Isoflupredone acetate

Cat. No.:	HY-134116		
CAS No.:	338-98-7		
Molecular Formula:	C <sub>23</sub> H <sub>29</sub> FO <sub>6</sub>		
Molecular Weight:	420.47		
Target:	Others		
Pathway:	Others		
Storage:	Powder	-20°C	3 years
	In solvent	-80°C	6 months
		-20°C	1 month



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : 125 mg/mL (297.29 mM; Need ultrasonic)

Concentration	Mass		
	1 mg	5 mg	10 mg
1 mM	2.3783 mL	11.8915 mL	23.7829 mL
5 mM	0.4757 mL	2.3783 mL	4.7566 mL
10 mM	0.2378 mL	1.1891 mL	2.3783 mL

Please refer to the solubility information to select the appropriate solvent.

### BIOLOGICAL ACTIVITY

#### Description

Isoflupredone acetate is a corticosteroids with anti-inflammatory activity. Isoflupredone acetate can be used for research ketosis, musculoskeletal disorders, hypersensitivity, infections, inflammatory diseases in cows, horse, pigs, et al.<sup>[1][2]</sup>.

#### In Vitro

Isoflupredone acetate (10<sup>-4</sup>, 10<sup>-7</sup>, or 10<sup>-10</sup> M; 48 or 96 h) mitigates the inflammatory and catabolic effects of IL-1β in synovial and osteochondral explants (from equine cadavers) to a greater extent in low concentrations (10<sup>-7</sup> M and 10<sup>-10</sup> M) than the high concentration (10<sup>-4</sup> M)<sup>[1]</sup>.

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

#### In Vivo

Isoflupredone acetate (0.05 mg/kg; i.m.; on days 2 and 4 after the challenge) prevents dry-matter intake and average daily gain reductions, and leads to faster Mannheimia haemolytica-infected clinical improvement when co-treated with [Oxytetracycline](#) (HY-B0275)<sup>[2]</sup>.

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	96 weanling heifers (Bronchopneumonia was induced by intrabronchial infusion of Mannheimia haemolytica) <sup>[2]</sup>
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Dosage:	0.05 mg/kg
Administration:	i.m.; on days 2 and 4 after the challenge
Result:	Infection caused a reduction in dry-matter intake and average daily gain (ADG) in heifers. Prevented these reductions and resulted in faster clinical improvement when co-treated with <a href="#">Oxytetracycline</a> (HY-B0275).

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## REFERENCES

- [1]. Trahan RA, et al. In vitro effects of three equimolar concentrations of methylprednisolone acetate, triamcinolone acetonide, and isoflupredone acetate on equine articular tissue cocultures in an inflammatory environment. Am J Vet Res. 2018 Sep;79(9):933-940.
- [2]. Hewson J, et al. Impact of isoflupredone acetate treatment on clinical signs and weight gain in weanling heifers with experimentally induced Mannheimia haemolytica bronchopneumonia. Am J Vet Res. 2011 Dec;72(12):1613-21.
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**Caution: Product has not been fully validated for medical applications. For research use only.**

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