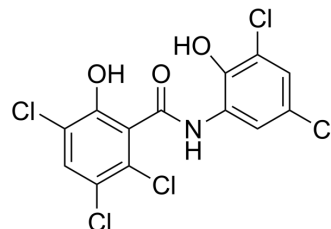


## Oxyclozanide

<b>Cat. No.:</b>	HY-17594												
<b>CAS No.:</b>	2277-92-1												
<b>Molecular Formula:</b>	C <sub>13</sub> H <sub>6</sub> Cl <sub>5</sub> NO <sub>3</sub>												
<b>Molecular Weight:</b>	401.46												
<b>Target:</b>	Parasite; Bacterial; Fungal; Oxidative Phosphorylation												
<b>Pathway:</b>	Anti-infection; Others												
<b>Storage:</b>	<table border="0"> <tr> <td>Powder</td> <td>-20°C</td> <td>3 years</td> </tr> <tr> <td></td> <td>4°C</td> <td>2 years</td> </tr> <tr> <td>In solvent</td> <td>-80°C</td> <td>2 years</td> </tr> <tr> <td></td> <td>-20°C</td> <td>1 year</td> </tr> </table>	Powder	-20°C	3 years		4°C	2 years	In solvent	-80°C	2 years		-20°C	1 year
Powder	-20°C	3 years											
	4°C	2 years											
In solvent	-80°C	2 years											
	-20°C	1 year											



### SOLVENT & SOLUBILITY

<b>In Vitro</b>	DMSO : 100 mg/mL (249.09 mM; Need ultrasonic)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	<b>Preparing Stock Solutions</b>	1 mM	2.4909 mL	12.4545 mL	24.9091 mL
		5 mM	0.4982 mL	2.4909 mL	4.9818 mL
10 mM		0.2491 mL	1.2455 mL	2.4909 mL	
Please refer to the solubility information to select the appropriate solvent.					
<b>In Vivo</b>	<ol style="list-style-type: none"> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 40% PEG300 &gt;&gt; 5% Tween-80 &gt;&gt; 45% saline Solubility: ≥ 2.5 mg/mL (6.23 mM); Clear solution</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% corn oil Solubility: ≥ 2.5 mg/mL (6.23 mM); Clear solution</li> </ol>				

### BIOLOGICAL ACTIVITY

<b>Description</b>	Oxyclozanide is an orally active salicylanilide anthelmintic agent that mainly acts by uncoupling oxidative phosphorylation in flukes. Oxyclozanide shows good anti-adenovirus, anti-biofilm, antifungal, and antibacterial activity <sup>[1][2][3]</sup> .
<b>IC<sub>50</sub> &amp; Target</b>	Schistosome
<b>In Vitro</b>	<p>Oxyclozanide inhibits meticillin-sensitive <i>S. pseudintermedius</i> isolates with MIC values of 0.5-1 µg/mL<sup>[3]</sup>.</p> <p>Oxyclozanide inhibits meticillin-resistant <i>S. pseudintermedius</i> isolates with MIC values of 0.5-2 µg/mL<sup>[3]</sup>.</p> <p>Oxyclozanide inhibits methicillin-resistant <i>S. aureus</i> (MRSA) with a MIC value of 1 µg/mL<sup>[3]</sup>.</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>

## In Vivo

Oxyclozanide (15 mg/kg (sheep), 10 mg/kg (cattle); oral administration) shows antiparasitic effectiveness in sheep and cattle [1].

Oxyclozanide (1500-5000 mg/kg; oral administration, once) induces multiple toxic symptoms in acute toxicity test of rats[2]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Healthy male and female Wistar rats (100-150 g)[2]
Dosage:	5000, 3690, 2730, 2025 and 1500 mg/kg
Administration:	Oral administration; 5000, 3690, 2730, 2025 and 1500 mg/kg; once
Result:	Induced toxic symptoms of depression, rough hair, inappetence and cyanotic lips, limbs and tail. Induced swelling spleen, bleeding spots in the liver and swelling stomachs at high-dose group.

## CUSTOMER VALIDATION

- L'UNIVERSITE GRENOBLE ALPES. 2021 Apr 13.

See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

## REFERENCES

[1]. Georgiev B, Gruev A. Efektivnost na levamisole i oxyclozanide sreshtu paramfistomatozata po ovtsete i govodata [Effectiveness of levamisole and oxyclozanide in paramphistomiasis in sheep and cattle]. Vet Med Nauki. 1979;16(3):45-51.

[2]. Wang W, et al. Acute and Subacute Toxicity Assessment of Oxyclozanide in Wistar Rats. Front Vet Sci. 2019 Sep 6;6:294.

[3]. Levinson MR, et al. The in vitro antibacterial activity of the anthelmintic drug oxyclozanide against common small animal bacterial pathogens. Vet Dermatol. 2019 Aug;30(4):314-e87.

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

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