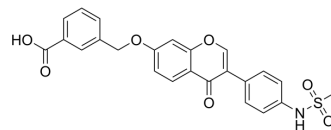


CVT-10216

Cat. No.:	HY-19801		
CAS No.:	1005334-57-5		
Molecular Formula:	C ₂₄ H ₁₉ NO ₇ S		
Molecular Weight:	465.48		
Target:	Aldehyde Dehydrogenase (ALDH)		
Pathway:	Metabolic Enzyme/Protease		
Storage:	Powder	-20°C	3 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro	DMF : 25 mg/mL (53.71 mM; Need ultrasonic and warming)																					
	DMSO : 20 mg/mL (42.97 mM; Need ultrasonic and warming)																					
	<table border="1"> <thead> <tr> <th rowspan="2">Solvent</th> <th rowspan="2">Mass</th> <th colspan="3">Concentration</th> </tr> <tr> <th>1 mg</th> <th>5 mg</th> <th>10 mg</th> </tr> </thead> <tbody> <tr> <td rowspan="3">Preparing Stock Solutions</td> <td>1 mM</td> <td>2.1483 mL</td> <td>10.7416 mL</td> <td>21.4832 mL</td> </tr> <tr> <td>5 mM</td> <td>0.4297 mL</td> <td>2.1483 mL</td> <td>4.2966 mL</td> </tr> <tr> <td>10 mM</td> <td>0.2148 mL</td> <td>1.0742 mL</td> <td>2.1483 mL</td> </tr> </tbody> </table>	Solvent	Mass	Concentration			1 mg	5 mg	10 mg	Preparing Stock Solutions	1 mM	2.1483 mL	10.7416 mL	21.4832 mL	5 mM	0.4297 mL	2.1483 mL	4.2966 mL	10 mM	0.2148 mL	1.0742 mL	2.1483 mL
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Please refer to the solubility information to select the appropriate solvent.																						
In Vivo	<p>1. Add each solvent one by one: 10% DMSO >> 90% corn oil</p> <p>Solubility: ≥ 2.08 mg/mL (4.47 mM); Clear solution</p>																					

BIOLOGICAL ACTIVITY

Description	CVT-10216 is a highly selective, reversible aldehyde dehydrogenase-2 (ALDH-2) inhibitor with an IC ₅₀ of 29 nM. CVT-10216 also has inhibitory effect of ALDH-1 with an IC ₅₀ of 1.3 μM. CVT-10216 can reduce excessive alcohol drinking in alcohol-preferring rats and exhibit anxiolytic effects ^[1] .
IC ₅₀ & Target	ALDH2
In Vivo	<p>CVT-10216 (intraperitoneal injection; 3.75, 7.5, or 15 mg/kg) exhibits a increase in social interaction as a dose-dependent manner, punctuated by a 2-fold increase in social interaction after 15 mg/kg in Fawn-Hooded rats^[1].</p> <p>CVT-10216 (intraperitoneal injection; 3.75 or 15 mg/kg) are determined 5 h into the third withdrawal. It has the anxiolytic effect of 15 mg/kg CVT-10216 in this model, but has no significant effects on locomotor activity^[1].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>

CUSTOMER VALIDATION

- Food Chem Toxicol. 2023 Nov 13:114129.

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REFERENCES

[1]. Overstreet DH, et al. A selective ALDH-2 inhibitor reduces anxiety in rats. Pharmacol Biochem Behav. 2009 Dec;94(2):255-61.

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

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