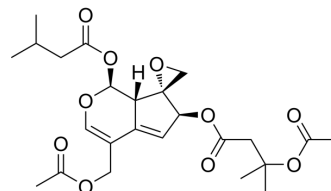


## Acevaltrate

Cat. No.:	HY-N2070
CAS No.:	25161-41-5
Molecular Formula:	C <sub>24</sub> H <sub>32</sub> O <sub>10</sub>
Molecular Weight:	480.5
Target:	Na <sup>+</sup> /K <sup>+</sup> ATPase
Pathway:	Membrane Transporter/Ion Channel
Storage:	4°C, protect from light * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



### SOLVENT & SOLUBILITY

In Vitro	DMSO : 100 mg/mL (208.12 mM; Need ultrasonic)																							
	Preparing Stock Solutions	<table border="1"> <thead> <tr> <th rowspan="2">Solvent Concentration</th> <th colspan="3">Mass</th> </tr> <tr> <th>1 mg</th> <th>5 mg</th> <th>10 mg</th> </tr> </thead> <tbody> <tr> <td>1 mM</td> <td>2.0812 mL</td> <td>10.4058 mL</td> <td>20.8117 mL</td> </tr> <tr> <td>5 mM</td> <td>0.4162 mL</td> <td>2.0812 mL</td> <td>4.1623 mL</td> </tr> <tr> <td>10 mM</td> <td>0.2081 mL</td> <td>1.0406 mL</td> <td>2.0812 mL</td> </tr> </tbody> </table>	Solvent Concentration	Mass			1 mg	5 mg	10 mg	1 mM	2.0812 mL	10.4058 mL	20.8117 mL	5 mM	0.4162 mL	2.0812 mL	4.1623 mL	10 mM	0.2081 mL	1.0406 mL	2.0812 mL			
		Solvent Concentration		Mass																				
			1 mg	5 mg	10 mg																			
		1 mM	2.0812 mL	10.4058 mL	20.8117 mL																			
5 mM	0.4162 mL	2.0812 mL	4.1623 mL																					
10 mM	0.2081 mL	1.0406 mL	2.0812 mL																					
Please refer to the solubility information to select the appropriate solvent.																								
In Vivo	1. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.08 mg/mL (4.33 mM); Clear solution																							

### BIOLOGICAL ACTIVITY

Description	Acevaltrate inhibits the Na <sup>+</sup> /K <sup>+</sup> -ATPase activity in the rat kidney and brain hemispheres with IC <sub>50</sub> s of 22.8 μM and 42.3 μM, respectively <sup>[1]</sup> .
IC <sub>50</sub> & Target	IC <sub>50</sub> : 22.8±1.1 μM (Na <sup>+</sup> /K <sup>+</sup> -ATPase, in rat kidney), 42.3±1.0 μM (Na <sup>+</sup> /K <sup>+</sup> -ATPase, in rat brain hemispheres) <sup>[1]</sup>
In Vitro	Acevaltrate differentially inhibit the activity of rat P-type ATPases in vitro. 60.7±7.3% inhibition of the rat H <sup>+</sup> /K <sup>+</sup> -ATPase is achieved at 100 μM <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### CUSTOMER VALIDATION

- 
- Acta Pharmacol Sin. 2021 Aug;42(8):1338-1346.

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

## REFERENCES

---

[1]. Bettero GM, et al. In vitro effect of valepotriates isolated from Valeriana glechomifolia on rat P-type ATPases. Planta Med. 2011 Oct;77(15):1702-6.

---

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: [tech@MedChemExpress.com](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA