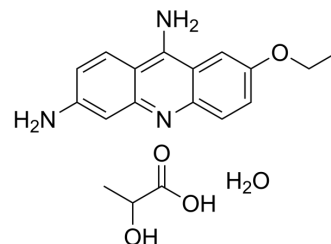


## Ethacridine lactate monohydrate

<b>Cat. No.:</b>	HY-B0889
<b>CAS No.:</b>	6402-23-9
<b>Molecular Formula:</b>	C <sub>18</sub> H <sub>23</sub> N <sub>3</sub> O <sub>5</sub>
<b>Molecular Weight:</b>	361.39
<b>Target:</b>	Bacterial
<b>Pathway:</b>	Anti-infection
<b>Storage:</b>	4°C, sealed storage, away from moisture * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



### SOLVENT & SOLUBILITY

<b>In Vitro</b>	DMSO : ≥ 100 mg/mL (276.71 mM)																														
	H <sub>2</sub> O : 2 mg/mL (5.53 mM; Need ultrasonic)																														
	* "≥" means soluble, but saturation unknown.																														
	<table border="1"> <thead> <tr> <th rowspan="2">Preparing Stock Solutions</th> <th rowspan="2">Solvent Concentration</th> <th rowspan="2">Mass</th> <th>1 mg</th> <th>5 mg</th> <th>10 mg</th> </tr> <tr> <th>1 mM</th> <th>5 mM</th> <th>10 mM</th> </tr> </thead> <tbody> <tr> <td></td> <td>1 mM</td> <td></td> <td>2.7671 mL</td> <td>13.8355 mL</td> <td>27.6709 mL</td> </tr> <tr> <td></td> <td>5 mM</td> <td></td> <td>0.5534 mL</td> <td>2.7671 mL</td> <td>5.5342 mL</td> </tr> <tr> <td></td> <td>10 mM</td> <td></td> <td>0.2767 mL</td> <td>1.3835 mL</td> <td>2.7671 mL</td> </tr> </tbody> </table>					Preparing Stock Solutions	Solvent Concentration	Mass	1 mg	5 mg	10 mg	1 mM	5 mM	10 mM		1 mM		2.7671 mL	13.8355 mL	27.6709 mL		5 mM		0.5534 mL	2.7671 mL	5.5342 mL		10 mM		0.2767 mL	1.3835 mL
Preparing Stock Solutions	Solvent Concentration	Mass	1 mg	5 mg	10 mg																										
			1 mM	5 mM	10 mM																										
	1 mM		2.7671 mL	13.8355 mL	27.6709 mL																										
	5 mM		0.5534 mL	2.7671 mL	5.5342 mL																										
	10 mM		0.2767 mL	1.3835 mL	2.7671 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 (6.92 mM); Clear solution</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (6.92 mM); Clear solution</li> </ol>																														

### BIOLOGICAL ACTIVITY

<b>Description</b>	Ethacridine lactate (Acrinol) monohydrate is a widely used antiseptic and abortifacient. Ethacridine lactate monohydrate is effective against <i>Staphylococcus aureus</i> and other gram-positive cocci. Ethacridine lactate monohydrate is also a poly(ADP-ribose) glycohydrolase (PARG) inhibitor <sup>[1][2][3]</sup> .
<b>IC<sub>50</sub> &amp; Target</b>	poly(ADP-ribose) glycohydrolase (PARG) <sup>[2]</sup>
<b>In Vitro</b>	Acrinol is effective against <i>S. aureus</i> including MRSA, with the MICs ranging from 100-200 µg/mL. The MIC of Acrinol for <i>Escherichia coli</i> is 200-800 µg/mL, and it is over 1,600 µg/mL for <i>Proteus vulgaris</i> and <i>Proteus mirabilis</i> <sup>[3]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

## In Vivo

Ethacridine lactate can be used for termination of pregnancy<sup>[1]</sup>.

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

## CUSTOMER VALIDATION

- Cell Rep. 2018 Oct 9;25(2):437-448.
- Elife. 2020 Dec 7;9:e61405.

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

## REFERENCES

[1]. Rotin LE, et al. Erlotinib synergizes with the poly(ADP-ribose) glycohydrolase inhibitor ethacridine in acute myeloid leukemia cells. *Haematologica*. 2016 Nov;101(11):e449-e453.

[2]. Gupta S, et, al. Ethacridine lactate -- a safe and effective drug for termination of pregnancy. *Indian J Matern Child Health*. 1993;4(2):59-61.

[3]. Usuki R, et, al. Antibacterial Activity of Acrinol against Organisms Isolated from Clinical Materials and Influence of Light on Antibacterial Activity of Acrinol. *Japanese Journal of Pharmaceutical Health Care and Sciences*. 2004 Jan; 30(2):72-77.

**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