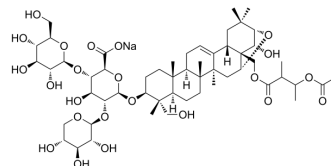


## Sodium aescinate

<b>Cat. No.:</b>	HY-N1404
<b>CAS No.:</b>	20977-05-3
<b>Molecular Formula:</b>	C <sub>54</sub> H <sub>83</sub> NaO <sub>23</sub>
<b>Molecular Weight:</b>	1123.21
<b>Target:</b>	NF-κB
<b>Pathway:</b>	NF-κB
<b>Storage:</b>	4°C, sealed storage, away from moisture and light * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light)



### SOLVENT & SOLUBILITY

<b>In Vitro</b>	DMSO : 100 mg/mL (89.03 mM; Need ultrasonic)																					
	H <sub>2</sub> O : 100 mg/mL (89.03 mM; Need ultrasonic)																					
	<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>0.8903 mL</td> <td>4.4515 mL</td> <td>8.9031 mL</td> </tr> <tr> <td>5 mM</td> <td>0.1781 mL</td> <td>0.8903 mL</td> <td>1.7806 mL</td> </tr> <tr> <td>10 mM</td> <td>0.0890 mL</td> <td>0.4452 mL</td> <td>0.8903 mL</td> </tr> </tbody> </table>	Solvent	Mass	Concentration			1 mg	5 mg	10 mg	Preparing Stock Solutions	1 mM	0.8903 mL	4.4515 mL	8.9031 mL	5 mM	0.1781 mL	0.8903 mL	1.7806 mL	10 mM	0.0890 mL	0.4452 mL	0.8903 mL
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Please refer to the solubility information to select the appropriate solvent.																						
<b>In Vivo</b>	1. Add each solvent one by one: PBS Solubility: 25 mg/mL (22.26 mM); Clear solution; Need ultrasonic																					

### BIOLOGICAL ACTIVITY

<b>Description</b>	Sodium aescinate is a triterpene saponin derived from <i>Aesculus hippocastanum</i> seeds, with anti-inflammatory and antioxidant activities <sup>[1]</sup> . Sodium aescinate inhibits hepatocellular carcinoma growth by targeting CARMA3/NF-κB pathway <sup>[2]</sup> .
<b>In Vitro</b>	Sodium aescinate can block signals transiting to downstream molecules AKT, ERK, inhibit the proliferation of breast cancer cell MCF-7 cell apoptosis and induced cell apoptosis by suppressing the activation of SRC <sup>[3]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
<b>In Vivo</b>	Sodium aescinate may effectively controls and improves wound healing in diabetic rats via its anti-inflammatory and antioxidant activities <sup>[1]</sup> . ?Sodium aescinate treatment can alleviate the symptom of polycystic ovary syndrome (PCOS) in rat model through regulating the PI3K/Akt/GSK3-β pathway <sup>[4]</sup> .

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## REFERENCES

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- [1]. Zhang Z, et al. The Efficacy of Sodium Aescinate on Cutaneous Wound Healing in Diabetic Rats. *Inflammation*. 2015 Oct;38(5):1942-8.
- [2]. Hou H, et al. CARMA3/NF- $\kappa$ B signaling contributes to tumorigenesis of hepatocellular carcinoma and is inhibited by sodium aescinate. *World J Gastroenterol*. 2019 Sep 28;25(36):5483-5493.
- [3]. Qi SM, et al. Effect of sodium aescinate in inducing human breast cancer MCF-7 cells apoptosis by inhibiting AKT, ERK and upstream signal SRC activity. *Zhongguo Zhong Yao Za Zhi*. 2015 Aug;40(16):3267-72.
- [4]. Chen L, et al. Effect of sodium aescinate treatment on PCOS rat model with insulin resistance. *Bratisl Lek Listy*. 2017;118(4):223-227.
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**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