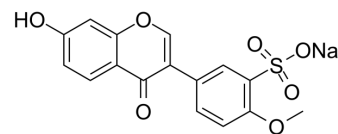


## Sodium formononetin-3'-sulfonate

<b>Cat. No.:</b>	HY-13063
<b>CAS No.:</b>	949021-68-5
<b>Molecular Formula:</b>	C <sub>16</sub> H <sub>11</sub> NaO <sub>7</sub> S
<b>Molecular Weight:</b>	370.31
<b>Target:</b>	Reactive Oxygen Species
<b>Pathway:</b>	Immunology/Inflammation; Metabolic Enzyme/Protease; NF-κB
<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

#### In Vitro

DMSO : 100 mg/mL (270.04 mM; Need ultrasonic)  
H<sub>2</sub>O : 25 mg/mL (67.51 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Concentration	Mass	1 mg	5 mg	10 mg
		1 mM	2.7004 mL	13.5022 mL	27.0044 mL
	5 mM	0.5401 mL	2.7004 mL	5.4009 mL	
	10 mM	0.2700 mL	1.3502 mL	2.7004 mL	

Please refer to the solubility information to select the appropriate solvent.

### BIOLOGICAL ACTIVITY

#### Description

Sodium formononetin-3'-sulfonate (Sul-F) is a water-sol. derivate of formononetin. IC<sub>50</sub> value: Target: Research results showed that treatment with Sul-F significantly prevented the elevation of ST-segment level, decreased the contents of creatine kinase-MB, lactate dehydrogenase, alanine aminotransferase and cardiac troponin T in serum and reduced the myocardium necrosis scores. These findings indicate that Sul-F has a protective potential against myocardial infarction injury. A possible mechanism for the protective effect is the elevated expression of endogenous antioxidant defense enzymes degraded lipid peroxidn. products and improved energy metab. of cardiac mitochondrial, thus attenuating cardiocyte apoptosis. Other reearch results showed that sodium formononetin-3'-sulfonate not only had favorable water, solubility but also had good lipid-lowering and liver-protection activities.

### REFERENCES

- [1]. Zhang, Shumin; Tang, Xuexi; Tian, Jingwei et al. Cardioprotective effect of sulphonated formononetin on acute myocardial infarction in rats. Basic & Clinical Pharmacology & Toxicology (2011), 108(6), 390-395.
- [2]. Wang, Qiuya; Meng, Qinghua; Zhang, Zunting et al. Synthesis, solubility, lipids-lowering and liver-protection activities of sulfonated formononetin. Yaoxue Xuebao

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(2009), 44(4), 386-389.

[3]. Cardioprotective Effect of Sulfonated Formononetin on Acute Myocardial Infarction in Rats.

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

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