# MCE MedChemExpress

## **Product** Data Sheet

### **Salsalate**

Cat. No.:HY-B1245CAS No.:552-94-3Molecular Formula: $C_{14}H_{10}O_5$ Molecular Weight:258.23

Target: Reactive Oxygen Species

Pathway: Immunology/Inflammation; Metabolic Enzyme/Protease; NF-кВ

Storage: Powder -20°C 3 years

4°C 2 years

In solvent -80°C 2 years

-20°C 1 year

#### **SOLVENT & SOLUBILITY**

In Vitro

DMSO : ≥ 100 mg/mL (387.25 mM)

\* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	3.8725 mL	19.3626 mL	38.7252 mL
	5 mM	0.7745 mL	3.8725 mL	7.7450 mL
	10 mM	0.3873 mL	1.9363 mL	3.8725 mL

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

In Vivo

- 1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (9.68 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (9.68 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (9.68 mM); Clear solution

#### **BIOLOGICAL ACTIVITY**

Description

Salsalate, a non-acetylated salicylate, is an effective antirheumatic agent that bypasses gastric absorption and also avoids cyclooxygenase inhibition. Salsalate has anti-inflammatory activity and reduces glucose levels, insulin resistance, and cytokine expression. Salsalate can be used in the research of type 2 diabetes<sup>[1][2]</sup>.

#### **CUSTOMER VALIDATION**

• Cell Mol Bioeng. 2022.

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#### **REFERENCES**

- [1]. Murthy SN, et al. Effects of salsalate therapy on recovery from vascular injury in female Zucker fatty rats. Diabetes. 2010;59(12):3240-3246.
- [2]. Scheiman JM, et al. Gastroduodenal mucosal damage with salsalate versus aspirin: results of experimental models and endoscopic studies in humans. Semin Arthritis Rheum. 1990;20(2):121-127.
- [3]. González F, et al. Salicylate administration suppresses the inflammatory response to nutrients and improves ovarian function in polycystic ovary syndrome. Am J Physiol Endocrinol Metab. 2020;319(4):E744-E752.

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

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