# Salicylic acid-$d_6$

**Cat. No.:** HY-B0167S

**CAS No.:** 285979-87-5

**Molecular Formula:** $C_7D_6O_3$

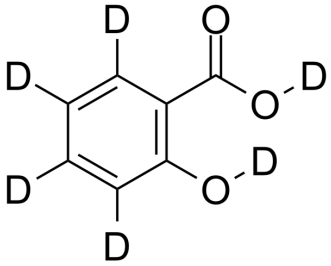
**Molecular Weight:** 144.16

**Target:** COX; Autophagy; Mitophagy; Apoptosis

**Pathway:** Immunology/Inflammation; Autophagy; Apoptosis

**Storage:**

| | | |
|---|---|---|
| Powder | -20°C | 3 years |
| | 4°C | 2 years |
| In solvent | -80°C | 6 months |
| | -20°C | 1 month |



## SOLVENT & SOLUBILITY

**In Vitro**

DMSO : 250 mg/mL (1734.18 mM; Need ultrasonic)

**Preparing Stock Solutions**

| Solvent / Mass / Concentration | 1 mg | 5 mg | 10 mg |
|---|---|---|---|
| 1 mM | 6.9367 mL | 34.6837 mL | 69.3674 mL |
| 5 mM | 1.3873 mL | 6.9367 mL | 13.8735 mL |
| 10 mM | 0.6937 mL | 3.4684 mL | 6.9367 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: ≥ 2.08 mg/mL (14.43 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.08 mg/mL (14.43 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.08 mg/mL (14.43 mM); Clear solution

## BIOLOGICAL ACTIVITY

**Description**

Salicylic acid-$d_6$ is a deuterium labeled Salicylic acid. Salicylic acid inhibits cyclo-oxygenase-2 (COX-2) activity independently of transcription factor (NF-κB) activation[1].

| $IC_{50}$ & Target | | | | |
|---|---|---|---|---|
| | COX-2 | Autophagy | Mitophagy | Apoptosis |

## REFERENCES

[1]. Mitchell JA, et al. Sodium salicylate inhibits cyclo-oxygenase-2 activity independently of transcription factor (nuclear factor kappaB) activation: role of arachidonic acid. Mol Pharmacol. 1997 Jun;51(6):907-12.



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