4-Hydroxyantipyrine

Cat. No.: HY-B2150

CAS No.: 1672-63-5

Molecular Formula: $C_{11}H_{12}N_2O_2$

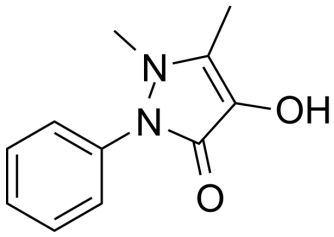
Molecular Weight: 204.23

Target: Drug Metabolite

Pathway: Metabolic Enzyme/Protease

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 : 50 mg/mL (244.82 mM; ultrasonic and warming and heat to 60°C)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	4.8964 mL	24.4822 mL	48.9644 mL
	5 mM	0.9793 mL	4.8964 mL	9.7929 mL
	10 mM	0.4896 mL	2.4482 mL	4.8964 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 (12.24 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (12.24 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

4-Hydroxyantipyrine (4-Hydroxyphenazone; NSC 174055) is the major metabolite of Antipyrine (HY-B0171), can be as a biodistribution promoter. 4-Hydroxyantipyrine can increase distribution of concentration ratio of Citicoline and Antipyrine in the brain[1][2].

In Vitro

4-Hydroxyantipyrine increase the tissue-to-plasma concentration ratio of Citicoline in the brain and liver and that of thiopental sodium in the brain, liver, and heart[1].

4-Hydroxyantipyrine enhances the blood-brain barrier (BBB) permeability of Antipyrine considering to be concerned with the increase of the K_p value of Antipyrine in the brain[2].

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

REFERENCES

[1]. Ohkawa Y, et al. Effects of 4-hydroxyantipyrine and its 4-O-sulfate on antipyrine as biodistribution promoter. Biol Pharm Bull. 2001 May;24(5):529-34.

[2]. Ohkawa Y, et al. Application of 4-hydroxyantipyrine and acetaminophen O-sulfate as biodistribution promoter. Biol Pharm Bull. 2001 Dec;24(12):1404-10.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA