Zoxazolamine

Cat. No.: HY-B1307

CAS No.: 61-80-3

Molecular Formula: $C_7H_5ClN_2O$

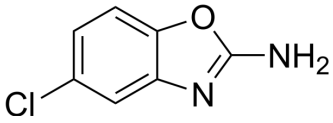
Molecular Weight: 168.58

Target: Cytochrome P450

Pathway: Metabolic Enzyme/Protease

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 (593.19 mM)

* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	5.9319 mL	29.6595 mL	59.3190 mL
5 mM	1.1864 mL	5.9319 mL	11.8638 mL
10 mM	0.5932 mL	2.9660 mL	5.9319 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 (14.83 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (14.83 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Zoxazolamine is widely used for a pharmacologic test that serves as a convenient indicator of changes in cytochrome P-450 activity in rodents.

In Vivo

Zoxazolamine is widely used for a pharmacologic test that serves as a convenient indicator of changes in cytochrome P-450 activity in rodents. The time-averaged serum clearance determined from tested concentrations data is 7.22±1.01 mL/min/kg for Zoxazolamine. Infusion of Zoxazolamine to righting reflex (LRR) at three different rates shows increasing Zoxazolamine concentration in serum and brain at the onset of the effect with increasing infusion rates. When the Zoxazolamine infusion is continued for 5 min beyond the onset of LRR, the concentrations of Zoxazolamine in the cerebrospinal fluid (CSF) at the offset of LRR are essentially identical to the onset concentrations[1].

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

PROTOCOL

Animal Administration [1]

Inbred male Lewis rats are used in this study. The animals are allowed 7 to 12 days to adjust to the local animal facilities and to recover possible stress incurred during transport. To compare drug concentrations in serum at the onset and offset of loss of the righting reflex, Zoxazolamine is infused into the femoral vein at a rate of 0.51 mg/min for 5 min beyond the onset of loss of the righting reflex. The infusion solution consists of 10 mg Zoxazolamine in 1 mL normal saline. Then, blood samples from the jugular vein are obtained from four rates at the onset and offset of loss of the righting reflex, using a procedure that yields mainstream blood[1].

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

REFERENCES

[1]. Yasuhara M, et al. Pharmacodynamics of zoxazolamine and chlorzoxazone in rats. Pharm Res. 1988 Jul;5(7):401-7.

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