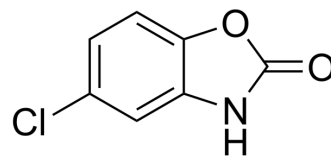


Chlorzoxazone

Cat. No.:	HY-B1462
CAS No.:	95-25-0
Molecular Formula:	C ₇ H ₄ ClNO ₂
Molecular Weight:	169.57
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 (589.73 mM)
 * "≥" means soluble, but saturation unknown.

	Solvent Concentration	Mass	1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM		5.8973 mL	29.4863 mL	58.9727 mL
	5 mM		1.1795 mL	5.8973 mL	11.7945 mL
	10 mM		0.5897 mL	2.9486 mL	5.8973 mL

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

In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
 Solubility: ≥ 2.5 mg/mL (14.74 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
 Solubility: ≥ 2.5 mg/mL (14.74 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Chlorzoxazone is a centrally acting muscle relaxant used to treat muscle spasm and the resulting pain or discomfort. It acts on the spinal cord by depressing reflexes. Chlorzoxazone is currently being used as a marker substrate in vitro/vivo studies to quantify cytochrome P450 2E1 (CYP2E1) activity in humans.

IC₅₀ & Target

CYP2

CUSTOMER VALIDATION

-
- Comput Struct Biotech. 2023 Feb 24.
 - Int Immunopharmacol. 2020 Nov;88:106790.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Yamamura Y, et al. Comprehensive kinetic analysis and influence of reaction components for chlorzoxazone 6-hydroxylation in human liver microsomes with CYP antibodies. Xenobiotica. 2015 Apr;45(4):353-360.

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

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