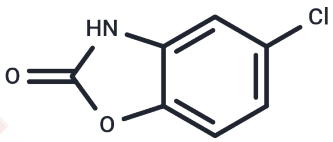
Data Sheet (Cat.No.T1650)

TargetMol

Chlorzoxazone

Chemical Properties



CAS No. : 95-25-0

Formula: C7H4ClNO2

Molecular Weight: 169.57

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Biological Description

Description	Chlorzoxazone (Chlorzoxazon) is a Muscle Relaxant. The physiologic effect of chlorzoxazone is by means of Centrally-mediated Muscle Relaxation.
Targets(IC50)	Cytochromes P450,Potassium Channel
In vivo	Chlorzoxazone is a central acting skeletal muscle relaxant that operates by suppressing reflex actions in the spinal column. It is capable of activating rat brain SK2 channel currents within cells. Metabolically, Chlorzoxazone is primarily transformed by CYP2E1 into 6-hydroxychlorzoxazone. Other human liver cytochrome P450 enzymes, such as CYP1A1, CYP1A2, and CYP3A4, may also contribute to its metabolism.

Solubility Information

Solubility	Ethanol: 32 mg/mL (188.71 mM),Sonication is recommended. DMSO: 45 mg/mL (265.38 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
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
50 mM	0.1179 mL	0.5897 mL	1.1795 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Reference

Lucas D, et al. Methods Enzymol, 1996, 272, 115-123.
Zhang Y, Gao J, Xu Y, et al. Investigation of cytochrome P450 inhibitory properties of deoxyshikonin, a bioactive compound from Lithospermum erythrorhizon Sieb. et Z ucc. Phytotherapy Research. 2022
Gao J, Zhang Y, Lei X, et al. Risk assessment of the inhibition of hydroxygenkwanin on human and rat cytochrome P450 by cocktail method. Toxicology in Vitro. 2021: 105281.
Cao Y, et al. J Pharmacol Exp Ther, 2001, 296(3), 683-689.

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