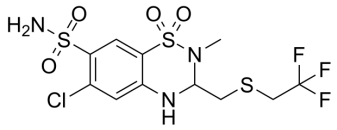
Polythiazide

Cat. No.:	HY-16403
CAS No.:	346-18-9
Molecular Formula:	$C_{11}H_{13}ClF_3N_3O_4S_3$
Molecular Weight:	439.88
Target:	Others
Pathway:	Others

Storage:

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



BIOLOGICAL ACTIVITY

Description

Polythiazide is a potent and orally active thiazide diuretic agent that has antihypertensive effect. Polythiazide can decrease edema and decrease blood pressure. Polythiazide also has phototoxicity[1][2][3].

In Vitro

Polythiazide (500 μM, 1 min) induces significant phototoxic NHIK 3025 cell death under Bluelight 2000 apparatus (Ex: 325 nM)[2].

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

In Vivo

Polythiazide (oral gavage, 10 mg/kg, daily for 5 days) Increases plasma cholesterol levels in Cholesterol-fed C57BL/cdJ mouse[3].

Polythiazide (oral administration, 0.4 mg/kg) shows diuretic and saluretic effects in hypertensive dogs and rats[1].

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

Animal Model:	Cholesterol-fed C57BL/cdJ mice[3]
Dosage:	10 mg/kg
Administration:	Oral gavage, daily for 5 days
Result:	Caused approximately 13% rise in total plasma cholesterol levels, and increased non-HDL lipoprotein fraction.

Animal Model:	Hypertensive dogs[1]
Dosage:	0.4 mg/kg
Administration:	Oral administration, daily for 5 days
Result:	Increased in excretion of sodium and chloride.

Animal Model:	Hypertensive rats[1]

Dosage:	0.05, 0.1, 0.2, 0.4 mg/kg
Administration:	Oral administration, twice a day for 3 days.
Result:	Displayed natriuretic and chloruretic effects.

REFERENCES

[1]. A SCRIABINE, et al. Pharmacological studies with polythiazide, a new diuretic and antihypertensive agent. Proc Soc Exp Biol Med. 1961 Aug-Sep;107:864-72.

[2]. E Selvaag, et al. Phototoxicity due to sulphonamide derived oral antidiabetics and diuretics: investigations in a cell culture model. Photodermatol Photoimmunol Photomed. 1996 Feb;12(1):1-6.

[3]. M N Krupp, et al. Effects of doxazosin and other antihypertensives on serum lipid levels and lipoprotein lipase in the C57BR/cdJ mouse. J Cardiovasc Pharmacol. 1989;13 Suppl 2:S11-8; discussion S18-9.

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