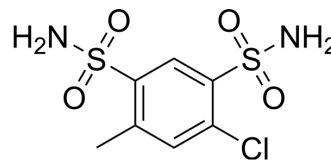


Disulfamide

Cat. No.:	HY-137364
CAS No.:	671-88-5
Molecular Formula:	C ₇ H ₉ ClN ₂ O ₄ S ₂
Molecular Weight:	284.74
Target:	Carbonic Anhydrase
Pathway:	Metabolic Enzyme/Protease
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Disulfamide, an orally active diuretic, is a carbonic anhydrase inhibitor with the IC ₅₀ value of 0.07 μM. Disulfamide leads to diuresis by inhibiting carbonic anhydrase and preventing the reabsorption of sodium and bicarbonate in the proximal tubule ^[1] .	
IC₅₀ & Target	IC ₅₀ : 0.07 μM (carbonic anhydrase) ^[1]	
In Vivo	Disulfamide (intraperitoneal injection, 200 mg/kg, once) has potential blood glucose raising properties in male Wistar rats ^[2] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.	
	Animal Model:	Male Wistar rats weighing between 200-300 g ^[2]
	Dosage:	200 mg/kg
	Administration:	Intraperitoneal injection; once
	Result:	Resulted in elevated blood sugar levels from an initial blood glucose concentration of 143.1 mg/100 mL to a one hour later final concentration of 194.6 mg/100 mL, an increase of 36%.

REFERENCES

[1]. CT Supuran, et al. Carbonic anhydrase inhibitors: Synthesis and inhibitory properties of 1,3,4-thiadiazole-2,5-bissulfonamide. European Journal of Medicinal Chemistry, Volume 31, Issue 11, 1996, Pages 843-846.

[2]. J M Foy, et al. Acute diuretic induced hyperglycaemia in rats. Life Sci. 1967 May 1;6(9):897-902.

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

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