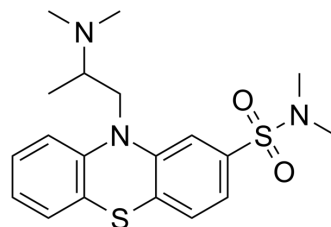


Dimethothiazine

Cat. No.:	HY-A0157
CAS No.:	7456-24-8
Molecular Formula:	C ₁₉ H ₂₅ N ₃ O ₂ S ₂
Molecular Weight:	391.55
Target:	Histamine Receptor; 5-HT Receptor
Pathway:	GPCR/G Protein; Immunology/Inflammation; Neuronal Signaling
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Dimethothiazine (Dimetotiazine; Fonazine) is an orally active tricyclic anti-histamine, anti-5-HT agent with a high activity against decerebrate rigidity, a little sedative activity and little soporific action. Dimethothiazine can reduce or abolish the effects of both static and dynamic fusimotor activity on the muscle spindle in decerebrate cat. Dimethothiazine can be used to research hemicrania and spasticity ^{[1][2][3]} .	
IC₅₀ & Target	Histamine, 5-HT ^[1]	
In Vivo	Dimethothiazine (0.5-16 mg/kg; i.v.; single dosage) reduces decerebrate rigidity in cats ^[2] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.	
	Animal Model:	Cats (decerebrate model; the carotid arteries were clamped and the mid-brain sectioned approximately between the colliculae) ^[2]
	Dosage:	0.5, 1, 2, 4, 8 and 16 mg/kg
	Administration:	i.v.; single dosage
	Result:	Reduced the discharge frequency of primary and secondary endings at 1-4 mg/kg. Reduced the sensitivity of the muscle spindle to stretch in preparations with intact ventral roots. Reduced the activity of the dynamic fusimotor fibres.

REFERENCES

- [1]. Nattero G, et al. Use of dimethothiazine in the prevention of hemicrania. *Minerva Med.* 1977 Mar 17;68(13):839-45.
- [2]. Maxwell DR, Rhodes KF. The effects of dimethothiazine on muscle spindle activity in the decerebrate cat. *Br J Pharmacol.* 1970 Jul;39(3):520-32.
- [3]. Griffiths MI, et al. The use of dimethothiazine in the treatment of childhood cerebral palsy. *Dev Med Child Neurol.* 1973 Feb;15(1):25-32.

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

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