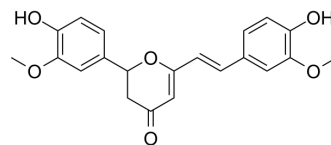


Cyclocurcumin

Cat. No.:	HY-N8251
CAS No.:	153127-42-5
Molecular Formula:	C ₂₁ H ₂₀ O ₆
Molecular Weight:	368.38
Target:	p38 MAPK
Pathway:	MAPK/ERK Pathway
Storage:	4°C, protect from light * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



BIOLOGICAL ACTIVITY

Description	Cyclocurcumin is a potent p38α inhibitor. Cyclocurcumin shows antirheumatic, antivasoconstrictive and antioxidant activities ^{[1][2][3]} .
In Vitro	<p>Cyclocurcumin (10-40 μM; 18 h) leads to significant inhibition in the release of TNF-α in a dose-dependent manner in LPS-stimulated human macrophages^[1].</p> <p>Cyclocurcumin (5-25 μM) inhibits phenylephrine (HY-B0769)-induced vasoconstriction in a concentration-dependent manner (IC₅₀=14.9±1.0 μM) in freshly isolated rat aortic rings^[2].</p> <p>Cyclocurcumin (5-25 μM; 30 min) inhibits influx of intracellular calcium in a dose-dependent manner. Cyclocurcumin inhibits L-type calcium channel-mediated vasoconstriction in a concentration-dependent manner. The anticontractile effect of Cyclocurcumin is reversible^[2].</p> <p>Cyclocurcumin has strong activity as a scavenger of ·OH and ·OOH free radicals preferentially by its 4'-OH phenolic radical via a hydrogen-atom transfer mechanism in water and a physiological environment^[3].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>

REFERENCES

- [1]. Fu M, et al. Cyclocurcumin, a curcumin derivative, exhibits immune-modulating ability and is a potential compound for the treatment of rheumatoid arthritis as predicted by the MM-PBSA method. *Int J Mol Med*. 2017 May;39(5):1164-1172.
- [2]. Kim K, et al. Cyclocurcumin, an Antivasoconstrictive Constituent of *Curcuma longa* (Turmeric). *J Nat Prod*. 2017 Jan 27;80(1):196-200.
- [3]. Li Y, et al. Antioxidant properties and free radical scavenging mechanisms of cyclocurcumin. *New Journal of Chemistry*, 2018, 42(15): 12698-12705.

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

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