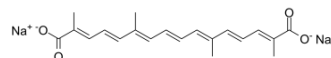


Transcrocetin disodium

Cat. No.:	HY-16502		
CAS No.:	591230-99-8		
Molecular Formula:	C ₂₀ H ₂₂ Na ₂ O ₄		
Molecular Weight:	372.37		
Target:	iGluR		
Pathway:	Membrane Transporter/Ion Channel; Neuronal Signaling		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



BIOLOGICAL ACTIVITY

Description	Transcrocetin disodium, extracted from saffron (<i>Crocus sativus</i> L.), acts as an NMDA receptor antagonist with high affinity.
IC ₅₀ & Target	NMDA receptor ^[1]
In Vitro	Transcrocetin (Transcrocetin, trans-Crocetin), a saffron metabolite originating from the crocin apocarotenoids, has been shown to exert strong NMDA receptor affinity and is thought to be responsible for the CNS activity of saffron. To ensure unchanged viability of Caco-2 cells throughout the transport experiments, cellular mitochondrial dehydrogenase activity of Caco-2 cells is measured by MTT assay after a 24 h incubation period with the test compounds: Hydroalcoholic saffron extract saffron extract (SE, 0.5-1 mg/mL) and crocin-1 (250-1000 μM) reveal no negative significant changes in cellular viability. Transcrocetin at 10 μM level does not change viability while higher concentrations (40-160 μM) reduces significantly cellular viability ^[1] .

PROTOCOL

Cell Assay ^[1]	<p>Cytotoxicity of test compounds is determined by MTT assay using Caco-2 cells in 96 well plates at a density of 20,000 cells per well in 200 μL FBS-free medium, grown for 96 h and followed by 24 h contact time with the test compounds (100 μL of serum-free media containing SE 0.5, 1, and 2 mg/mL; trans-crocin-1 250, 500, and 1000 μM; Transcrocetin 10, 40, 80, and 160 μM) and incubation at 37°C/5% CO₂. The incubation solutions are aspirated, each well is washed twice with 150 μL of PBS and 50 μL of MTT solution are added (2.5 mg/mL in PBS). Supernatants are discarded and the formed formazan is dissolved in 50 μL of DMSO. The absorption of the resulting solution is determined at λ=492 nm against reference wavelength λ=690 nm^[1].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>
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REFERENCES

[1]. Lautenschläger M, et al. Intestinal formation of trans-Crocetin from saffron extract (*Crocus sativus* L.) and in vitro permeation through intestinal and blood brain barrier. *Phytomedicine*. 2015 Jan 15;22(1):36-44.

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

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