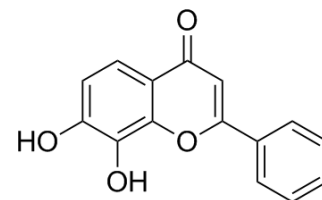


7,8-Dihydroxyflavone

Cat. No.:	HY-W013372		
CAS No.:	38183-03-8		
Molecular Formula:	C ₁₅ H ₁₀ O ₄		
Molecular Weight:	254.24		
Target:	Trk Receptor		
Pathway:	Protein Tyrosine Kinase/RTK		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



BIOLOGICAL ACTIVITY

Description	7,8-Dihydroxyflavone is a potent and selective TrkB agonist that mimics the physiological actions of Brain-derived neurotrophic factor (BDNF). Displays therapeutic efficacy toward various neurological diseases ^[1] .
IC₅₀ & Target	TrkB ^[1]
In Vitro	7,8-Dihydroxyflavone (500 nM) protects the primary cortical neurons and locus coeruleus (LC) neurons from Aβ-induced toxicity and promotes dendritic growth and synaptogenesis ^[1] .
In Vivo	7,8-Dihydroxyflavone (5 mg/kg/day) prevents synaptic loss and memory deficits in a mouse model of Alzheimer's Disease ^[1] . Administration of 7,8- dihydroxyflavone to mice activates TrkB in the brain, inhibits kainic acid-induced toxicity, decreases infarct volumes in stroke in a TrkBdependent manner, and is neuroprotective in an animal model of Parkinson disease ^[2] .

REFERENCES

[1]. Zhang Z, et al. 7,8-dihydroxyflavone prevents synaptic loss and memory deficits in a mouse model of Alzheimer's disease. *Neuropsychopharmacology*. 2014 Feb;39(3):638-50.

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

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