

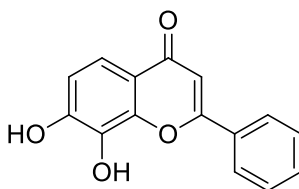
Catalog # 10-1174
7,8-Dihydroxyflavone

CAS# 38183-03-8

7,8-Dihydroxy-2-phenyl-4H-1-benzopyran-4-one

7,8-DHF

Lot # X103045



A selective TrkB agonist ($K_d=320$ nM) with potent neurotrophic activity.^{1,2} Significantly improves motor deficits, ameliorates brain atrophy and extends survival in the well-characterized N171-82Q Huntington's disease mouse model.³ Post-traumatic brain injury-treatment promotes neurogenesis in the hippocampus in a mouse model.⁴ Improves motor performance and motor neuronal survival in an ALS mouse model.⁵

- 1) Jang *et al.* (2010), *A selective TrkB agonist with potent neurotrophic activities by 7,8-dihydroxyflavone*; Proc. Natl. Acad. Sci. USA, **107** 2687
- 2) Liu *et al.* (2014) *Biochemical and biophysical investigation of the brain-derived neurotrophic factor mimetic 7,8-dihydroxyflavone in the binding and activation of the TrkB receptor*; J. Biol. Chem., **289** 27571
- 3) Jiang *et al.* (2013) *Small-molecule TrkB receptor agonist improve motor function and extend survival in a mouse model of Huntington's disease*; Hum. Mol. Genet., **22** 2462
- 4) Zhao *et al.* (2016) *Post-injury Treatment of 7,8-Dihydroxyflavone Promotes Neurogenesis in the Hippocampus of the Adult Mouse*; J. Neurotrauma, **33** 2055
- 5) Korkmaz *et al.* (2014) *7,8-dihydroxyflavone improves motor performance and enhances lower motor neuronal survival in a mouse model of amyotrophic lateral sclerosis*; Neurosci. Lett., **566** 286

PHYSICAL DATA

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|------------------------|--|
| Molecular Weight: | 254.25 |
| Molecular Formula: | C ₁₅ H ₁₀ O ₄ |
| Purity: | 98% by TLC |
| | NMR: (Conforms) |
| Solubility: | DMSO (up to 25 mg/ml) or Ethanol (up to 6 mg/ml) |
| Physical Description: | Yellow or tan solid |
| Storage and Stability: | Store as supplied desiccated at -20°C for up to 2 years from the date of purchase. Solutions in DMSO or ethanol may be stored at -20°C for up to 1 week. |

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