Product Specification Sheet

**Product Name:** 7,8-Dihydroxyflavone  
**Catalog Number:** C7181-10 (powder)  
**Package Size:** 10 mg

Technical information:
- **Chemical Formula:** C_{15}H_{10}O_{4}  
- **CAS #:** 38183-03-8  
- **Molecular Weight:** 254.24  
- **Purity:** >98%  
- **Formulation:** White solid  
- **Solubility:** Soluble in DMSO up to 100 mM  
- **Chemical Name:** 7,8-dihydroxy-2-phenyl-4H-chromen-4-one  
- **Storage:** Store solid powder at 4°C desiccated; Store DMSO solution at -20°C.

Handling:  
- For C7181-10 (powder), add 3.93 mL of DMSO to make 10 mM solution.

Biological Activity:  
7,8-Dihydroxyflavone binds to the extracellular domain of tyrosine kinase receptor B (Kd = 320 nM) and activate the receptor activity. It inhibits glutamate-triggered apoptosis in hippocampal neurons in vitro and in vivo. Administration of 7,8-dihydroxyflavone to mice activated TrkB in the brain, inhibited kainic acid-induced toxicity, decreased infarct volumes in stroke in a TrkB-dependent manner, and was neuroprotective in an animal model of Parkinson disease. It also reverses memory deficits and BACE1 elevation in a mouse model of Alzheimer's Disease.

Reference:
2. Latha Devi et al. 7,8-Dihydroxyflavone, a Small-Molecule TrkB Agonist, Reverses Memory Deficits and BACE1 Elevation in a Mouse Model of Alzheimer's Disease. Neuropsychopharmacology advance online publication 7 September 2011.  

For Technical Support: technical@cellagentech.com

*For research use only, not for clinical or diagnostic use.*