

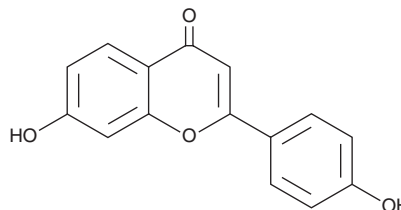
# PRODUCT INFORMATION



## 7,4'-Dihydroxyflavone

Item No. 35491

**CAS Registry No.:** 2196-14-7  
**Formal Name:** 7-hydroxy-2-(4-hydroxyphenyl)-4H-1-benzopyran-4-one  
**Synonym:** 7,4'-DHF  
**MF:** C<sub>15</sub>H<sub>10</sub>O<sub>4</sub>  
**FW:** 254.2  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 330 nm  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:** ≥4 years  
**Item Origin:** Plant/Unidentified sp.



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

7,4'-Dihydroxyflavone (7,4'-DHF) is supplied as a solid. A stock solution may be made by dissolving the 7,4'-DHF in the solvent of choice, which should be purged with an inert gas. 7,4'-DHF is soluble in the organic solvent dimethyl formamide at a concentration of approximately 1 mg/ml.

### Description

7,4'-DHF is a flavonoid that has been found in *G. uralensis* and has diverse biological activities.<sup>1-3</sup> It inhibits the activity of rat lens aldose reductase (IC<sub>50</sub> = 3.8 μM).<sup>1</sup> 7,4'-DHF is active against *L. donovani* amastigotes and *T. b. rhodesiense*, but not *T. cruzi*, trypomastigotes (IC<sub>50</sub>s = 11.1, 6.9, and >30 μg/ml, respectively).<sup>2</sup> It scavenges DPPH (Item No. 14805) radicals when used at a concentration of 15 μM.<sup>3</sup>

### References

1. Matsuda, H., Morikawa, T., Toguchida, I., *et al.* Structural requirements of flavonoids and related compounds for aldose reductase inhibitory activity. *Chem. Pharm. Bull. (Tokyo)* **50(6)**, 788-795 (2002).
2. Tasdemir, D., Kaiser, M., Brun, R., *et al.* Antitrypanosomal and antileishmanial activities of flavonoids and their analogues: In vitro, in vivo, structure-activity relationship, and quantitative structure-activity relationship studies. *Antimicrob. Agents Chemother.* **50(4)**, 1352-1364 (2006).
3. Cotellet, N., Bernier, J.-L., Catteau, J.-P., *et al.* Antioxidant properties of hydroxy-flavones. *Free Radic. Biol. Med.* **20(1)**, 35-43 (1996).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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