

## Icariin

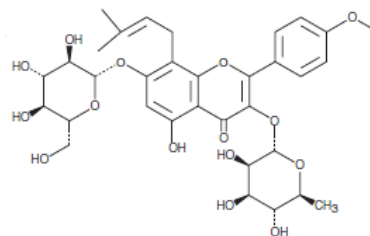
**Catalog #:** 27217

**Lot #:** 130123

**Size:** 1 g

**Structure:**

**CAS Registry #:** 489-32-7



**Purity:** ≥97%

**Chemical Formula:** C<sub>33</sub>H<sub>40</sub>O<sub>15</sub>

**Molecular Weight:** 676.6

**Description:** Icariin is a PDE5 inhibitor. It is the active component of the Chinese medicinal plant *E. brevicornum*. It can induce differentiation of cardiomyocytes and upregulates the expression of cardiac genes. Icariin increase the proliferation and differentiation of cultured human osteoblasts, which appears to be mediated in part by upregulating bone morphogenetic protein 2 mRNA.

**Appearance:** A crystalline solid

**Solubility:** Soluble in DMSO and DMF, purged with an inert gas. Solubility in DMSO and DMF is ~20 mg/ml. For maximum solubility, dissolve in DMSO and then dilute with the aqueous buffer of choice. Do not store aqueous solutions for more than one day.

**Biological Activity:** Icariin inhibits human recombinant PDE5 with an IC<sub>50</sub> value of 5.9 μM.

**Storage/Stability:** Store at or below -20°C for up to two years.

**Quality Control:** The purity was determined by HPLC analysis.

### References:

1. Dell'Agli, M, *et al.*, *J. Nat. Prod.* 2008;**71(9)**:1513-1517.
2. Chen, Y., *et al.*, *Pharm Res.* 2008;**25(9)**:2190-2199.
3. Ding, L., *et al.*, *Acta Pharmacol Sin.* 2007;**28(10)**:1541-1549.
4. Yin, X., *et al.*, *Chin Med J.* 2007;**120(3)**:204-210.