LKT Laboratories, Inc.

Icariin

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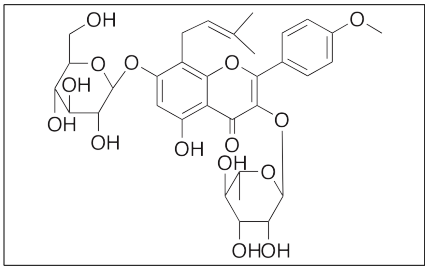
Product Information

Product ID I0901
CAS No. 489-32-7
Chemical Name 3-[(6-Deoxy-α-L-mannopyranosyl)oxy]-7-(ß-D- glucopyranosyloxy)-5-hydroxy-2-(4-methoxyphenyl)-8-(3-methyl-2-butenyl)-4H-1-benzopyran -4-one
Synonym



Formula $C_{33}H_{40}O_{15}$
Formula Wt. 676.66
Melting Point 231.5°C
Purity ≥97%
Solubility Soluble in pyridine. Insoluble in water, alcohol, chloroform, acetone, methanol or ethyl acetate.
Store Temp 4°C
Ship Temp Ambient

Bulk quanitites available upon request

Product ID	Size
I0901	100 mg
I0901	500 mg
I0901	1 g

Description Icariin is a flavonol glycoside originally found in *Epimedium* that exhibits vasodilatory, antidepressant, neuroprotective, antioxidative, and anti-osteoporotic activities. Icariin inhibits phosphodiesterase 5 (PDE5), increasing cGMP and NO concentrations. Icariin inhibits AAPH-induced oxidative DNA damage in vitro. In animal models, icariin decreases immobility time in the forced swim and tail suspension tests and decreases stress-induced expression of monoamine oxidases (MAOs). In other animals, icariin improves searching time and distance in the Morris water maze; it also decreases levels of malondialdehyde and amyloid-ß (Aß) in animal models of Alzheimer's disease. This compound also inhibits osteoclast growth and differentiation, potentially suppressing bone resorption.

References

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Chen KM, Ge BF, Liu XY, et al. Icariin inhibits the osteoclast formation induced by RANKL and macrophage-colony stimulating factor in mouse bone marrow culture. Pharmazie. 2007 May;62(5):388-91. PMID: 17557750.

Ning H, Xin ZC, Lin G, et al. Effects of icariin on phosphodiesterase-5 activity in vitro and cyclic guanosine monophosphate level in cavernous smooth muscle cells. Urology. 2006 Dec;68(6):1350-4. PMID: 17169663.

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