LKT Laboratories, Inc.

Coumestrol

Product Information

Product ID C5680

CAS No. 479-13-0

Chemical Name 3,9-Dihydroxy-6H-benzofuro[3,2-c][1]benzopyran-6- one
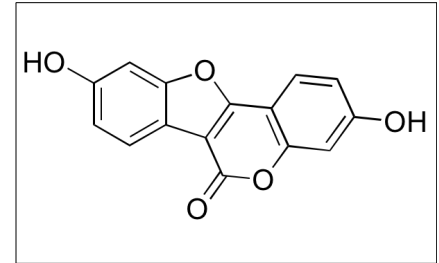
Synonym Cumoesterol, Cumoestrol, Cumostrol

Formula $C_{15}H_8O_5$

Formula Wt. 268.2

Melting Point 385°C

Purity ≥96%

Solubility Insoluble in water. Slightly soluble in methanol, ethanol or chloroform.

Store Temp Ambient

Ship Temp Ambient

Bulk quanitites available upon request

Product ID	Size
C5680	10 mg
C5680	25 mg

Description Coumestrol is a phytoestrogen found in various plant sources such as soy, spinach, and clover; it exhibits estrogenic, anti-inflammatory, immunomodulatory, anti-osteoporotic, and antidepressant activities. Coumestrol acts as an agonist at ERß and inhibits aromatase and 3α-hydroxysteroid dehydrogenase. Coumestrol decreases immobility in animals undergoing the forced swim test. Additionally, this compound decreases levels of TNF-α, IL-1ß, IL-6, and RANKL, limits T cell differentiation and activation, and suppresses formation of osteoclasts in vitro.

References Karieb S, Fox SW. Suppression of T cell-induced osteoclast formation. Biochem Biophys Res Commun. 2013 Jul 12;436(4):619-24. PMID: 23764400.

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Walf AA, Rhodes ME, Frye CA. Antidepressant effects of ERbeta-selective estrogen receptor modulators in the forced swim test. Pharmacol Biochem Behav. 2004 Jul;78(3):523-9. PMID: 15251261.

Kuiper GG, Lemmen JG, Carlsson B, et al. Interaction of estrogenic chemicals and phytoestrogens with estrogen receptor beta. Endocrinology. 1998 Oct;139(10):4252-63. PMID: 9751507.