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Product Information

Product ID B3358 CAS No. 491-80-5

Chemical Name

Synonym 4'-Methylgenistein, Biochanin

Formula C₁₆H₁₂O₅ Formula Wt. 284.27 Melting Point 210-213°C Purity ≥98%

Solubility Soluble in acetone, chloroform, methanol, DMSO (55 mg/mL),

ethanol (9 mg/mL).

Pricing and Availability

Bulk quanitites available upon request

Product ID	Size	List Price
B3358	100 mg	\$72.00
B3358	250 mg	\$131.40
B3358	1 g	\$210.40

Store Temp 4°C Ship Temp Ambient

Description Biochanin A is an isoflavone/flavonoid found in plants in the Fabaceae family, such as clover, soy, and alfalfa. Biochanin A exhibits anticancer, anti-metastatic, estrogenic, neuroprotective, anti-osteoporotic, antiviral, and anti-inflammatory activities. Biochanin A may activate PPARα and PPARγ. In pancreatic cancer cells, biochanin A inhibits cellular proliferation, migration, and invasion, and suppresses activation of Akt and MAPKs. In other cellular models, biochanin A acts as a phytoestrogen and increases expression of ERB. Biochanin A also improves cognitive deficits in animal models of Alzheimer's disease. In stem cells, this compound inhibits adipocyte differentiation and increases osteoblast differentiation. Additionally, biochanin A inhibits replication of influenza virus and suppresses production of IL-6, IL-8, IL-10, and TNF-α in vitro.

References Wang L, Waltenberger B, Pferschy-Wenzig EM, et al. Natural product agonists of peroxisome proliferator-activated receptor gamma (PPARy): a review. Biochem Pharmacol. 2014 Jul 30. [Epub ahead of print]. PMID: 25083916.

> Biradar SM, Joshi H, Chheda TK. Biochanin-A ameliorates behavioural and neurochemical derangements in cognitive-deficit mice for the betterment of Alzheimer's disease. Hum Exp Toxicol. 2014 Apr;33(4):369-82. PMID: 23900307.

Bhardwaj V, Tadinada SM, Jain A, et al. Biochanin A reduces pancreatic cancer survival and progression. Anticancer Drugs. 2014 Mar;25(3):296-302. PMID: 24201306.

Nynca A, Swigonska S, Piasecka J, et al. Biochanin A affects steroidogenesis and estrogen receptor-B expression in porcine granulosa cells. Theriogenology. 2013 Oct 15;80(7):821-8. PMID: 23953692.

Su SJ, Yeh YT, Su SH, et al. Biochanin a promotes osteogenic but inhibits adipogenic differentiation: evidence with primary adipose-derived stem cells. Evid Based Complement Alternat Med. 2013;2013:846039. PMID: 23843885.

Sithisarn P, Michaelis M, Schubert-Zsilavecz M, et al. Differential antiviral and anti-inflammatory mechanisms of the flavonoids biochanin A and baicalein in H5N1 influenza A virus-infected cells. Antiviral Res. 2013 Jan;97(1):41-8. PMID: 23098745.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.