
Product Data Sheet

Product Name: Isocryptotanshinone

Cat. No.: GC34178

Chemical Properties

Cas. No. 22550-15-8

SMILES O=C1C2=C(C3=C(C=C2)C(C)(C)CCC3)C(C4=C1[C@H](C)CO4)=O

Formula $C_{19}H_{20}O_3$ M.Wt 296.36

Solubility Soluble in DMSO Storage Store at -20°C

General tips For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

Structure

Background

Isocryptotanshinone is a potent signal transducer and activator of transcription 3 (STAT3) and protein tyrosine phosphatase 1B PTP1B inhibitor, with an IC₅₀ of 56.1 μM for PTP1B.

It is showed that tanshinones significantly inhibited A549 proliferation and Isocryptotanshinone (ICTS) exhibits the strongest activity. Isocryptotanshinone inhibits the constitutive STAT3 and p-STAT3 (Y705) expression in concentration and time-dependent manners. Isocryptotanshinone dramatically inhibits the IL-6-stimulated expression of p-STAT3 (Y705) in a time-dependent manner[1].

[1]. Guo S, et al. Isocryptotanshinone, a STAT3 inhibitor, induces apoptosis and pro-death autophagy in A549 lung cancer cells. J Drug Target. 2016 Dec;24(10):934-942. [2]. Han YM, et al. PTP1B inhibitory effect of abietane diterpenes isolated from Salvia miltiorrhiza. Biol Pharm Bull. 2005 Sep;28(9):1795-7.

Caution: Product has not been fully validated for medical applications. For research use only.

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