

Product Data Sheet

Product Name: Jervine
Cat. No.: GC11111

Chemical Properties

Cas. No. 469-59-0

Chemical Name (3S,3'R,3'aS,6'S,6aS,6bS,7'aR,9R,11aS,11bR)-3-hydroxy-3',6',10,11b-tetramethylspiro[1,2,3,4,6,6a,6b,7,8,11a-decahydrobenzo[a]fluorene-9,2'-3a,4,5,6,7,7a-hexahydro-3H-furo[3,2-b]pyridine]-11-one

SMILES CC1CC2C(C(C3(O2)CCC4C5CC=C6CC(CCC6(C5C(=O)C4=C3C)C)O)C)NC1

Formula $C_{27}H_{39}NO_3$ M.Wt 425.6

Solubility DMF: 2 mg/ml, Ethanol: 10 mg/ml, Ethanol: PBS (pH 7.2) (1:3): 0.25 mg/ml
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 sizes: ship with RT, or blue ice upon request.

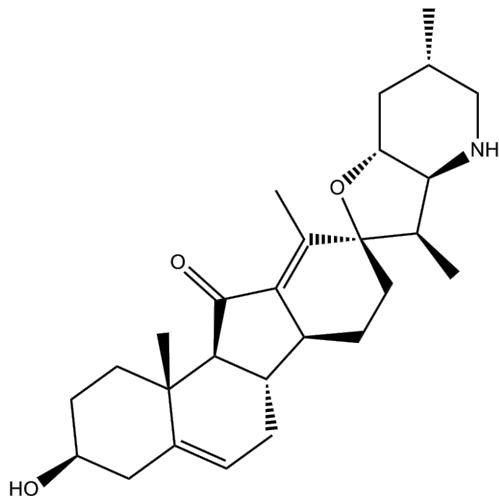
Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

Structure



Background

Jervine(11-Ketocyclopamine) is a naturally occurring steroidal alkaloid that causes cyclopia by blocking sonic hedgehog(Shh) signaling; Jervine is an inhibitor of Smo. IC50 value:Target: sonic hedgehog is derived from the Veratrum plant species. It is a close structural analog of cyclopamine which specifically inhibits the hedgehog (Hh) pathway by interaction with the hedgehog signaling protein Smo. Jervine can be used to induce abnormal morphogenesis in a number of experimental models. Jervine is an inhibitor of Smo.

References:

- [1]. Incardona JP, et al. Cyclopamine inhibition of Sonic hedgehog signal transduction is not mediated through effects on cholesterol transport. Dev Biol. 2000 Aug 15;224(2):440-52.
- [2]. Chen JK, et al. Small molecule modulation of Smoothened activity. Proc Natl Acad Sci U S A.

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

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

2002 Oct 29;99(22):14071-6.

[3]. Mistretta CM, et al. Cyclopamine and jervine in embryonic rat tongue cultures demonstrate a role for Shh signaling in taste papilla development and patterning: fungiform papillae double in number and form in novel locations in dorsal lingual epithelium. Dev Biol. 2003 Feb 1;254(1):1-18.

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

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA