



LKT Laboratories, Inc.

Arenobufagin

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Product Information

Product ID A6818

CAS No. 464-74-4

Chemical Name

Synonym

Formula $C_{24}H_{32}O_6$

Formula Wt. 416.51

Melting Point

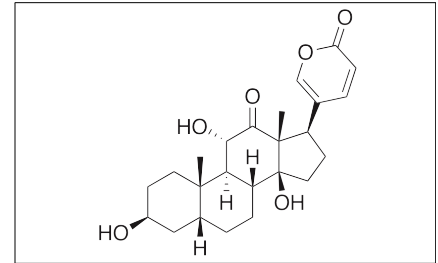
Purity $\geq 98\%$

Solubility 10mM in DMSO

Store Temp $-20^{\circ}C$

Ship Temp Ambient

Description Arenobufagin is a bufanolide steroid found in the Argentine toad *Bufo arenarum*. This compound exhibits anticancer chemotherapeutic and anti-angiogenic properties, but is also cardiotoxic, inhibiting cardiovascular Na^{+}/K^{+} pumps. In cellular models, arenobufagin induces autophagy and apoptosis, inhibiting tumor growth through indirect inhibition of the PI3K/Akt/mTOR signaling pathway. Arenobufagin also inhibits VEGFR2 directly through blockade of ATP-binding sites.



Bulk quantities available upon request

Product ID	Size
A6818	1 mg
A6818	5 mg
A6818	25 mg

References Zhang DM, Liu JS, Deng LJ, et al. Arenobufagin, a natural bufadienolide from toad venom, induces apoptosis and autophagy in human hepatocellular carcinoma cells through inhibition of PI3K/Akt/mTOR pathway. *Carcinogenesis*. 2013 Jun;34(6):1331-42. PMID: 23393227.

Li M, Wu S, Liu Z, et al. Arenobufagin, a bufadienolide compound from toad venom, inhibits VEGF-mediated angiogenesis through suppression of VEGFR-2 signaling pathway. *Biochem Pharmacol*. 2012 May 1;83(9):1251-60. PMID: 22305746.

Cruz Jdos S, Matsuda H. Arenobufagin, a compound in toad venom, blocks Na^{+} - K^{+} pump current in cardiac myocytes. *Eur J Pharmacol*. 1993 Aug 3;239(1-3):223-6. PMID: 8223897.

Garraffo HM, Gros EG. Biosynthesis of bufadienolides in toads. VI. Experiments with [1,2- 3H]cholesterol, [21- ^{14}C]coprostanol, and 5 beta-[21- ^{14}C]pregnanolone in the toad *Bufo arenarum*. *Steroids*. 1986 Sep-Oct;48(3-4):251-7. PMID: 3127947.

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