



LKT Laboratories, Inc.

Icilin

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Product Information

Product ID I0933

CAS No. 36945-98-9

Chemical Name

Synonym AG 3-5

Formula $C_{16}H_{13}N_3O_4$

Formula Wt. 311.3

Melting Point

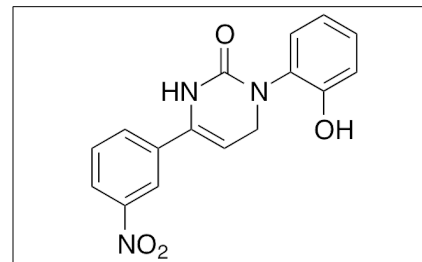
Purity $\geq 98\%$

Solubility Soluble in water (0.1 mg/ml) at 25° C, DMSO:PBS pH 7.2(1:5), DMSO (50 mg/ml), and DMF.

Store Temp -20° C

Ship Temp Ambient

Description Icilin is an agonist at transient receptor potential melastatin 8 (TRPM8) channels; it may block transient receptor potential vanilloid 3 (TRPV3) channels. Icilin displays both hyperalgesic and analgesic activities as well as anti-inflammatory and anticancer properties. Activation of TRPM8 channels induces hyperalgesia and allodynia, but long-term activation desensitizes the channels to induce pain relief. Like menthol, icilin acts as a cooling agent, as TRPM8 channels are cold-sensitive. In animal models of colitis, icilin decreases levels of pro-inflammatory cytokines. Icilin inhibits cell motility in pancreatic ductal adenocarcinoma cells and also decreases levels of E2F1 and induces G1 phase cell cycle arrest in prostate cancer cells.



Pricing and Availability

Bulk quantities available upon request

Product ID	Size	List Price
I0933	5 mg	\$70.00
I0933	10 mg	\$105.30
I0933	50 mg	\$435.50

References Burgos-Vega CC, Ahn DD, Bischoff C, et al. Meningeal transient receptor potential channel M8 activation causes cutaneous facial and hindpaw allodynia in a preclinical rodent model of headache. Cephalalgia. 2015 May 5. [Epub ahead of print]. PMID: 25944818.

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Cucu D, Chiritoiu G, Petrescu S, et al. Characterization of functional transient receptor potential melastatin 8 channels in human pancreatic ductal adenocarcinoma cells. Pancreas. 2014 Jul;43(5):795-800. PMID: 24658318.

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Lee S, Chun JN, Kim SH, et al. Icilin inhibits E2F1-mediated cell cycle regulatory programs in prostate cancer. Biochem Biophys Res Commun. 2013 Nov 29;441(4):1005-10. PMID: 24239550.

Ramachandran R, Hyun E, Zhao L, et al. TRPM8 activation attenuates inflammatory responses in mouse models of colitis. Proc Natl Acad Sci U S A. 2013 Apr 30;110(18):7476-81. PMID: 23596210.

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