

Icilin

Catalog No: tcsc1922



Available Sizes

Size: 10mg

Size: 50mg



Specifications

CAS No:

36945-98-9

Formula:

$C_{16}H_{13}N_3O_4$

Pathway:

Membrane Transporter/Ion Channel

Target:

TRP Channel

Purity / Grade:

>98%

Solubility:

DMSO : ≥ 54 mg/mL (173.47 mM); H₂O :

Alternative Names:

AG-3-5

Observed Molecular Weight:

311.29

Product Description

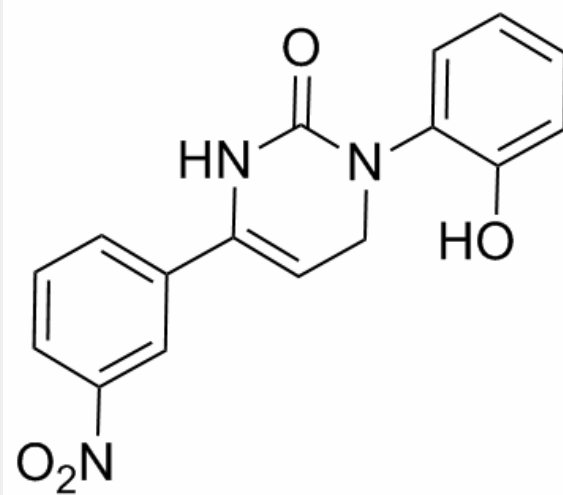
Icilin(AG 3-5) is a synthetic super-agonist of TRPM8 ion channel.

IC50 value:

Target: TRPM8

in vitro: icilin, a super-cooling agent, down-regulated the expression of cell cycle signature genes and caused G1 arrest in PC-3 prostate cancer cells. icilin affected cell cycle-related transcriptional modules and identified E2F1 transcription factor as a target master regulator of icilin. icilin reduced the activity and expression levels of E2F1 [1]. Icilin concentration-response curves were significantly shifted to the right when pH was lowered from 7.3 to 6.9, whereas those with menthol were unaltered in solutions of pH 6.1 [2]. Icilin modulated the expression level of various cell cycle regulators at transcription or post-translational levels. In addition, icilin activated JNK and p38 kinase pathways, but not ERK [4].

in vivo: Rats injected with icilin (0.5, 1, 2.5, 5mg/kg, i.p.) displayed dose-related WDS that were inhibited by pretreatment with a fixed dose of clonidine (0.15 mg/kg, s.c.). Shaking behavior caused by a fixed dose (2.5mg/kg) of icilin was also inhibited in a dose-related manner by clonidine pretreatment (0.03-0.15 mg/kg, s.c.) and reduced by clonidine posttreatment (0.15 mg/kg, s.c.) [3].



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