

GV-58

Catalog No: tcsc3617



Available Sizes

Size: 1mg

Size: 5mg



Specifications

CAS No:

1402821-41-3

Formula:

$C_{18}H_{26}N_6OS$

Pathway:

Membrane Transporter/Ion Channel

Target:

Calcium Channel

Purity / Grade:

>98%

Solubility:

10 mM in DMSO

Observed Molecular Weight:

374.5

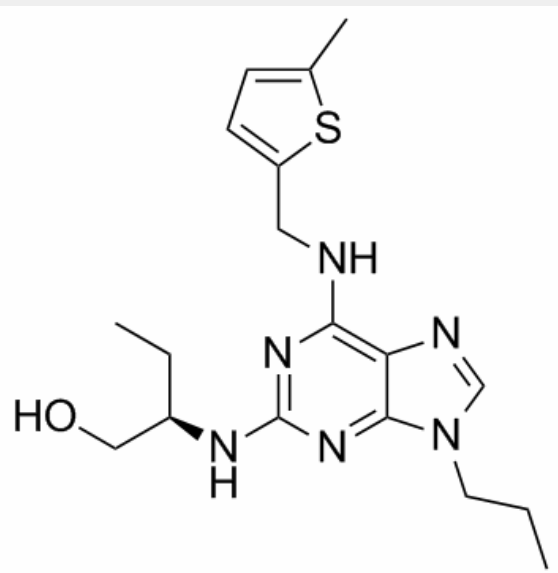
Product Description

GV-58 is a potent, selective N- and P/Q-type Ca^{2+} channels agonist with EC50 of 7.21/8.81 μM for N-type/P-Q-type Ca^{2+} channel; 20-fold less potent CDK inhibitor activity.

IC50 value: 7.21/8.81 μM (N-type/P-Q-type Ca^{2+} channel) [1]

Target: Ca^{2+} channel agonist

In comparison with the parent molecule, (R)-roscovitine, GV-58 has a 20-fold less potent cyclin-dependent kinase antagonist effect, a 3- to 4-fold more potent Ca²⁺ channel agonist effect, and 4-fold higher efficacy as a Ca²⁺ channel agonist. GV-58 had no agonist activity (up to 100 μ m) on the L-type α -subunit we tested (Cav1.3). In summary, GV-58 greatly improved upon (R)-roscovitine in terms of our properties of interest, with a \square 4-fold increase in efficacy as an agonist for N- and P/Q-type Ca²⁺ channels, a \square 3- to 4-fold increase in potency as an agonist for N- and P/Q-type Ca²⁺ channels, and a 20-fold decrease in potency as a Cdk antagonist.



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