

BRL-50481

Catalog No: tcsc0032567



Available Sizes

Size: 5mg

Size: 10mg

Size: 25mg

Size: 50mg

Size: 100mg



Specifications

CAS No:

433695-36-4

Formula:

$C_9H_{12}N_2O_4S$

Pathway:

Metabolic Enzyme/Protease

Target:

Phosphodiesterase (PDE)

Purity / Grade:

>98%

Solubility:

DMSO : 300 mg/mL (1228.15 mM; Need ultrasonic and warming)

Observed Molecular Weight:

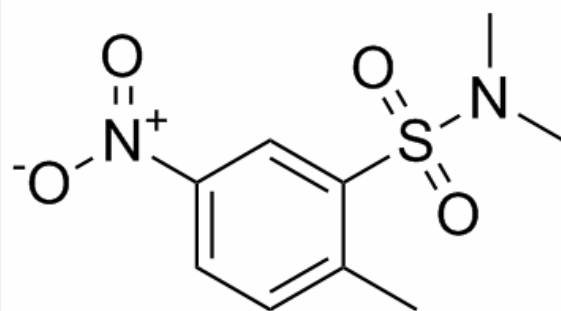
244.27

Product Description

BRL-50481 is a novel and selective inhibitor of **PDE7** with **IC₅₀**s of 0.15, 12.1, 62 and 490 μM for **PDE7A**, **PDE7B**, **PDE4** and **PDE3**, respectively.

IC50 & Target: IC50: 0.15 μM (PDE7A), 12 μM (PDE7B), 62 μM (PDE4), 490 μM (PDE3)^[1]

In Vitro: BRL-50481 increases the cAMP content ($19.1 \pm 6.2\%$ of IBMX response at 300 μM) but is considerably less potent. BRL-50481 (30 μM) fails to suppress proliferation by itself but significantly potentiates the effect of rolipram. BRL-50481 (30 μM) has no effect on IL-15-induced proliferation but augments the inhibitory effect of rolipram. Pretreatment (30 min) of human monocytes with BRL-50481 has, by itself, a negligible (~ 2 to 10%) inhibitory effect on TNF α output at all concentrations tested. BRL-50481 also potentiates the inhibitory effect of PGE₂ on LPS-induced TNF α release. BRL-50481 has no significant effect by itself on κB -dependent transcription ($5.6 \pm 1.9\%$ inhibition at 30 μM) and fails to enhance the effect of rolipram (maximum inhibition, $52.9 \pm 2.7\%$; pIC₃₀ value of 5.33 ± 0.12). BRL-50481 suppresses, in a concentration-dependent manner, LPS-induced TNF α release in monocytes in which PDE7A1 is induced ($21.7 \pm 1.6\%$ inhibition at 30 μM at the 12-h time point)^[2].



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!