Web: www.taiclone.com
Tel: +886-2-2735-9682
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# 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

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## Product Description

BRL-50481 is a novel and selective inhibitor of **PDE7** with **$IC_{50}$**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±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 TNFα output at all concentrations tested. BRL-50481 also potentiates the inhibitory effect of $PGE_2$ on LPS-induced TNFα release. BRL-50481 has no significant effect by itself on κB-dependent transcription (5.6±1.9% inhibition at 30 μM) and fails to enhance the effect of rolipram (maximum inhibition, 52.9±2.7%; $pIC_{30}$ value of 5.33±0.12). BRL-50481 suppresses, in a concentration-dependent manner, LPS-induced TNFα release in monocytes in which PDE7A1 is induced (21.7±1.6% inhibition at 30 μM at the 12-h time point)[2].