## Product Datasheet

# GSK481

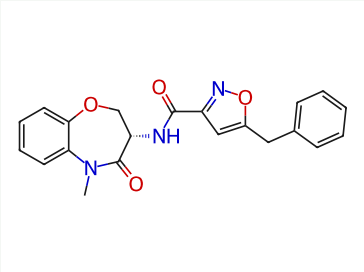
Catalog No. **BP-02346** · CAS **1622849-58-4** · Form **free base** · Physical state **solid** · Color **Light brown to brown** · Version **1.0** · Revision **2026-09-10**

**FOR RESEARCH USE ONLY. NOT FOR HUMAN OR VETERINARY USE.**

| Target | Research area |
|---|---|
| **RIP kinase** | **Inflammation/Immunology** |

| | |
|---|---|
| Molecular formula | $C_{21}H_{19}N_3O_4$ |
| Molecular weight | **377.3933** |

**STRUCTURE**




## DESCRIPTION

GSK481 is a potent inhibitor of Receptor-interacting serine/threonine-protein kinase 1 (RIPK1 or RIP1; IC50 value 2.8 nM for inhibition of S166 phosphorylation of hWT RIP1) exhibiting a remarkable specificity over >450 other kinases. GSK'481 protects against TNF-induced inflammation and lethal shock.

## BIOLOGICAL ACTIVITY

GSK481 is a highly effective, selective and specific RIPK1 inhibitor with an IC50 value of 1.3 nM, which can inhibit the phosphorylation of Ser166 in wild-type human RIPK1 (IC50 value of 2.8 nM). The IC50 value of GSK481 against U937 cells was 10 nM.

## SOLUBILITY

Soluble in DMSO

## REFERENCES

[1]. Harris PA et al. DNA-Encoded Library Screening Identifies Benzo[b][1,4]oxazepin-4-ones as Highly Potent and Monoselective Receptor Interacting Protein 1 Kinase Inhibitors. J Med Chem, 2016 Mar 10, 59(5):2163-78.

[2]. Lee HL, et al. Simultaneous flow cytometric immunophenotyping of necroptosis, apoptosis and RIP1-dependent apoptosis. Methods. 2018 Feb 1;134-135:56-66.