SRPIN340

Cat. No.: HY-13949
CAS No.: 218156-96-8
Molecular Formula: C₁₈H₁₈F₃N₃O
Molecular Weight: 349.35
Target: SRPK; Virus Protease
Pathway: Cell Cycle/DNA Damage; Anti-infection
Storage: Powder -20°C 3 years
4°C 2 years
In solvent -80°C 6 months
-20°C 1 month

SOLVENT & SOLUBILITY

<table>
<thead>
<tr>
<th>Solvent</th>
<th>Mass (mg/mL)</th>
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<tbody>
<tr>
<td>1 mg</td>
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<tr>
<td>5 mg</td>
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<td>10 mg</td>
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Preparing Stock Solutions

In Vitro

DMSO: ≥ 42 mg/mL (120.22 mM)
* "≥" means soluble, but saturation unknown.

In Vivo

1. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
Solubility: ≥ 2.5 mg/mL (7.16 mM); Clear solution

BIOLOGICAL ACTIVITY

Description
SRPIN340 is an ATP-competitive serine-arginine-rich protein kinase (SRPK) inhibitor, with a \( K_i \) of 0.89 μM for SRPK1.

IC₅₀ & Target
\( K_i: 0.89 \) μM (SRPK1)[¹]

In Vitro
SRPIN340 is a serine-arginine-rich protein kinase (SRPK) inhibitor, with a \( K_i \) of 0.89 μM for SRPK1. SRPIN340 also inhibits SRPK2, but shows no significant inhibition on other SRPK, such as Clk1 and Clk4. SRPIN340 promotes degradation of SRp75, which is necessary for HIV expression. SRPIN340 suppresses the propagation of Sindbis virus (IC₅₀, 60 μM) as well as severe acute respiratory syndrome virus[¹]. SRPIN340 shows inhibitory effect on leukemia cell lines, such as AML HL60, ALL-T Molt4 and Jurkat, with IC₅₀s of 44.7 μM, 92.2 μM and 82.3 μM, respectively[²].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.
Leukemic cells (5 × 10^4 cells/well) and isolated PBMCs (8 × 10^4 cells/well) are seeded in 96-well plates. Each well contained 100 μL of complete RPMI medium and 100 μL of SRPIN340 solution at different concentrations. The compound is diluted in RPMI medium with 10% fetal bovine serum and 0.4% DMSO (v/v). After 48 h of culture, MTT (5 mg/mL) is added to the wells (3 h, 37°C). The plates are centrifuged at room temperature for 30 min 500 × g, followed by the removal of the MTT solution and the addition of 100 μL/well of DMSO to solubilize the formazan. Absorbance is measured at 540 nm in a microplate reader. Each experimental procedure is performed in triplicate [2]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES
