**GSK319347A**

Cat. No.: HY-14682  
CAS No.: 862812-98-4  
Molecular Formula: C₂₂H₁₉N₃O₅S₂  
Molecular Weight: 469.53  
Target: IKK  
Pathway: NF-κB  
Storage: Please store the product under the recommended conditions in the COA.

---

**Solvent & Solubility**

**In Vitro**

<table>
<thead>
<tr>
<th>Concentration</th>
<th>1 mg</th>
<th>5 mg</th>
<th>10 mg</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 mM</td>
<td>2.1298 mL</td>
<td>10.6489 mL</td>
<td>21.2979 mL</td>
</tr>
<tr>
<td>5 mM</td>
<td>0.4260 mL</td>
<td>2.1298 mL</td>
<td>4.2596 mL</td>
</tr>
<tr>
<td>10 mM</td>
<td>0.2130 mL</td>
<td>1.0649 mL</td>
<td>2.1298 mL</td>
</tr>
</tbody>
</table>

Preparing Stock Solutions  

10 mM in DMSO

Please refer to the solubility information to select the appropriate solvent.

---

**BIOLOGICAL ACTIVITY**

**Description**

GSK319347A is a dual inhibitor of TBK1 and IKKε with IC₅₀s of 93 nM and 469 nM, respectively. GSK319347A also inhibits IKK2 with an IC₅₀ of 790 nM.

**IC₅₀ & Target**

<table>
<thead>
<tr>
<th>Target</th>
<th>IC₅₀</th>
</tr>
</thead>
<tbody>
<tr>
<td>TBK1</td>
<td>93 nM (IC₅₀)</td>
</tr>
<tr>
<td>IKK-ε</td>
<td>469 nM (IC₅₀)</td>
</tr>
<tr>
<td>IKK2</td>
<td>790 nM (IC₅₀)</td>
</tr>
</tbody>
</table>

In Vitro

GSK319347A (Compound 1) inhibits TBK1 enzyme with an IC₅₀ of 93 nM, which also translates into good cell potency (72 nM). Moreover, IKK-3 Inhibitor exhibits excellent selectivity against cell-cycle kinases CDK2 and AurB[1]. IKK-3 Inhibitor (Compound 13) is a novel IκB kinase 2 (IKK2) inhibitor with an IC₅₀ of 790 nM[2].

---

**REFERENCES**


Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898          Fax: 609-228-5909          E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA