MS31 trihydrochloride

Cat. No.: HY-125837A
Molecular Formula: C₂₀H₃₀Cl₃N₃O₂
Molecular Weight: 450.83
Target: Epigenetic Reader Domain
Pathway: Epigenetics
Storage: Powder
-20°C 3 years
4°C 2 years
In solvent
-80°C 6 months
-20°C 1 month

SOLVENT & SOLUBILITY

In Vitro
DMSO : 62.5 mg/mL (138.63 mM; Need ultrasonic)

Preparing Stock Solutions

<table>
<thead>
<tr>
<th>Solvent</th>
<th>Mass</th>
<th>1 mg</th>
<th>5 mg</th>
<th>10 mg</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 mM</td>
<td>2.2181 mL</td>
<td>11.0907 mL</td>
<td>22.1813 mL</td>
<td></td>
</tr>
<tr>
<td>5 mM</td>
<td>0.4436 mL</td>
<td>2.2181 mL</td>
<td>4.4363 mL</td>
<td></td>
</tr>
<tr>
<td>10 mM</td>
<td>0.2218 mL</td>
<td>1.1091 mL</td>
<td>2.2181 mL</td>
<td></td>
</tr>
</tbody>
</table>

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

BIOLOGICAL ACTIVITY

Description
MS31 trihydrochloride is a potent, highly affinity and selective fragment-like methyllysine reader protein spindlin 1 (SPIN1) inhibitor. MS31 trihydrochloride potently inhibits the interactions between SPIN1 and H3K4me3 (IC₅₀=77 nM, AlphaLISA; 243 nM, FP). MS31 trihydrochloride selectively binds Tudor domain II of SPIN1 (K₆=91 nM). MS31 trihydrochloride potently inhibits binding of trimethyllysine-containing peptides to SPIN1, and is not toxic to nontumorigenic cells[1].

IC₅₀ & Target
IC₅₀: 77 nM (SPIN1 by AlphaLISA), 243 nM (SPIN1 by FP)[1]
K₆: 91 nM (SPIN1)[1]

In Vitro
MS31 trihydrochloride potently inhibits binding of trimethyllysine-containing peptides to SPIN1, displays high binding affinity, is highly selective for SPIN1 over other epigenetic readers and writers, directly engages SPIN1 in cells, and is not toxic to nontumorigenic cells. MS31 trihydrochloride selectively binds tudor domain II of SPIN1[1].

REFERENCES

Product Data Sheet

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