BG45

Cat. No.: HY-18712  
CAS No.: 926259-99-6  
Molecular Formula: C₁₁H₁₀N₄O  
Molecular Weight: 214.22  
Target: HDAC  
Pathway: Cell Cycle/DNA Damage; 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 : ≥ 48 mg/mL (224.07 mM)  
* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions

<table>
<thead>
<tr>
<th>Concentration</th>
<th>Mass 1 mg</th>
<th>Mass 5 mg</th>
<th>Mass 10 mg</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 mM</td>
<td>4.6681 mL</td>
<td>23.3405 mL</td>
<td>46.6810 mL</td>
</tr>
<tr>
<td>5 mM</td>
<td>0.9336 mL</td>
<td>4.6681 mL</td>
<td>9.3362 mL</td>
</tr>
<tr>
<td>10 mM</td>
<td>0.4668 mL</td>
<td>2.3340 mL</td>
<td>4.6681 mL</td>
</tr>
</tbody>
</table>

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

In Vivo  
1. BG45 is diluted in natural saline (NS).[2]

BIOLOGICAL ACTIVITY

Description  
BG45 is an HDAC class I inhibitor with selectivity for HDAC3 (IC₅₀ = 289 nM). It inhibits HDAC1, HDAC2, and HDAC6 with greatly reduced potency (IC₅₀s = 2, 2.2, and >20 μM, respectively). IC₅₀ value: 289 nM (HDAC3), 2 μM (HDAC1), 2.2 μM (HDAC2), >20 μM (HDAC6). Target: HDAC. At concentrations up to 50 mg/kg, BG45 alone or in combination with Bortezomib has been shown to dose-dependently inhibit tumor growth in a mouse model of multiple myeloma.[1]

IC₅₀ & Target  
HDAC3, IC₅₀: 0.289 μM; HDAC1, IC₅₀: 2.0 μM; HDAC2, IC₅₀: 2.2 μM

CUSTOMER VALIDATION

www.MedChemExpress.com
See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

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