Compound Handling Instructions

1 What is included in the package?
The package contains the foam holding box, packing list, a blue ice box (or MCE® Cooling Rack), and compound product. After opening the package, please verify that all of the contents are present. If anything is missing or in error, please call 609-228-6898, and our after-sales staff will assist you.

2 How can I obtain product Data Sheets, QA files, etc.?
A: We automatically send product Data Sheet and QA documents to your email after shipment. B: You can also download these files on the product webpage on MedChemExpress.com. C: Contact our customer service by calling 609-228-6898 or via email sales@MedChemExpress.com.

3 After delivery of the compounds the blue ice has melted, will this lead to product deterioration?
Most MCE inhibitors are relatively stable at room temperatures, so if the blue ice melted it will not affect product quality. Products can be freely used. For some special compounds which may be more environmentally sensitive, we will provide additional packaging to ensure product stability.

4 What are the proper storage guidelines for the product?
Recommended storage conditions and precautions regarding proper product handling are contained in the product COA. Here are storage guidelines for some typical compounds:

<table>
<thead>
<tr>
<th>Powder</th>
<th>-20°C</th>
<th>3 years</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4°C</td>
<td>2 years</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>In solvent</th>
<th>-80°C</th>
<th>6 months</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-20°C</td>
<td>1 month</td>
</tr>
</tbody>
</table>

If the solution is stored at -20°C for more than one month, it should be re-examined to ensure its efficacy. Avoid repeating freezing and thawing. Storage conditions for some special products should refer to their COAs.

5 How should I handle the products before formulation or use?
During transportation, the compounds may adhere to the neck or cap of the vial. Before opening the vial, please centrifuge to gather the compound at the bottom of the vial.

6 How can I prepare the compound storage solution?
Select the appropriate solvent for the preparation of stock solution based on your experiment needs. Solubility information is available at the product webpage. Currently we only offer solubility data in DMSO and/or water; for solubility of other solvents, please email to tech@MedChemExpress.com. If you can not find the solubility information you are looking for, or you are having difficulty preparing a the product in solution form, you can also get help via the email above. Once prepared, aliquot the stock solution to routine usage volumes and store at -20°C or -80°C. Avoid repeated freezing and thawing.

Molarity Calculator from MCE official website is recommended for the calculation: www.MedChemExpress.com/Molarity%20Calculator.htm

7 How do I dilute the compound solution for cell assay?
Stock solution using ddH2O as a solvent can be directly diluted with medium to prepare the working solution. If DMSO is used to prepare the stock solution, the stock solution is diluted in the culture medium to prepare a working solution. Make sure the concentration of DMSO is <0.5% to avoid poisoning the cells. A negative control in the experiment is usually the culture medium with DMSO at the same concentration. It is recommended that the process of dilution is performed in a stepwise manner to avoid compound precipitating caused by fast change of concentration.

8 How do I use these compounds during animal experiments? ie: method of administration, dosage, solvent preparation, and administrative cycle?
Stock solution using ddH2O as a solvent can be directly diluted with PBS or 0.9% NaCl to ready the working solution. Stock solution using DMSO as a solvent can also be diluted with PBS or 0.9% NaCl to prepare the working solution. In order to reduce its toxicity to animals, the final concentration of DMSO in working solution should preferably be 2% or lower. When precipitates form during the dilution process due to their low water solubility, you can also use a co-solvent to help dissolve the compounds. Common co-solvents contain glycerol; Tween 80; sodium carboxymethylcellulose (CMC-Na); cyclodextrin; PEG400, etc. A suspension can also be used for oral or intraperitoneal injection. Please send an email to tech@MedChemExpress.com if you require further assistance.
Methods of administration and solvent preparation used in paper may be available at the product webpage. MCE has not independently confirmed the accuracy of these methods and they are distributed for reference only.

### Conversion between different animal models based on BSA:

<table>
<thead>
<tr>
<th>Species</th>
<th>Weight (kg)</th>
<th>Body Surface Area (m²)</th>
<th>Km factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dog</td>
<td>10</td>
<td>0.5</td>
<td>20</td>
</tr>
<tr>
<td>Rabbit</td>
<td>1.8</td>
<td>0.15</td>
<td>12</td>
</tr>
<tr>
<td>Guinea pig</td>
<td>0.4</td>
<td>0.05</td>
<td>8</td>
</tr>
<tr>
<td>Rat</td>
<td>0.15</td>
<td>0.025</td>
<td>6</td>
</tr>
<tr>
<td>Hamster</td>
<td>0.08</td>
<td>0.02</td>
<td>5</td>
</tr>
<tr>
<td>Mouse</td>
<td>0.02</td>
<td>0.007</td>
<td>3</td>
</tr>
</tbody>
</table>

Animal A (mg/kg) = Animal B (mg/kg) multiplied by \[
\frac{\text{Animal B Km}}{\text{Animal A Km}}
\]

### Administration volumes considered good practice (and possible maximal dose volumes):

<table>
<thead>
<tr>
<th>Species</th>
<th>Route and volumes (mL/kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Oral</td>
</tr>
<tr>
<td>Mouse</td>
<td>10 (50)</td>
</tr>
<tr>
<td>Rat</td>
<td>10 (40)</td>
</tr>
<tr>
<td>Rabbit</td>
<td>10 (15)</td>
</tr>
<tr>
<td>Dog</td>
<td>5 (15)</td>
</tr>
</tbody>
</table>

### Is the compound sterile?

DMSO itself is strongly bactericidal and will not introduce bacteria to compounds. It is however important to keep the operating environment and the instrument be sterilized before experimental use. Compounds can also be sterilized by filtration prior to use depending on specific experimental requirements. High temperature and high pressure sterilization are **NOT** recommended.

Products are for research use only and are not intended for human use. We do not sell to patients.

**Our Product Portfolio Includes:**

- **Inhibitors**
- **Screening Libraries**
- **Disease-Related Products**
- **Inhibitor Cocktails**
- **Antibody-Drug Conjugate Related Products**
- **Natural Products**
- **Dye Reagents**
- **Vitamin D-Related Products**

**Compound Screening Libraries (96-well):**

A collection of stored chemicals optimized for a specific research purpose, usually used in **high-throughput screening, drug discovery and new indication research.** MedChemExpress (MCE) compound libraries consist of **over 3000 small molecules** with validated biological and pharmacological activities.

- **Bioactive Compound Library**
- **FDA-Approved Drug Library**
- **Epigenetics Compound Library**
- **GPCR/G Protein Compound Library**
- **Clinical Compound Library**
- **Anti-Cancer Compound Library**

**Customize Your Library:**

- Specific Compounds
- Quantities
- Plate Map
- Concentration
- Format (Dry/solid or DMSO Solution)

**Top Publications Citing Use of MCE Products:**

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