**Product Data Sheet**

**Lycorine hydrochloride**

Cat. No.: HY-N0289  
CAS No.: 2188-68-3  
Molecular Formula: \( \text{C}_{16}\text{H}_{18}\text{ClN}_{4}\)  
Molecular Weight: 323.77  
Target: Autophagy  
Pathway: Autophagy

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: \( \geq 31 \text{ mg/mL (95.75 mM)} \)

*“\( \geq \)” means soluble, but saturation unknown.*

<table>
<thead>
<tr>
<th>Preparing Stock Solutions</th>
<th>Concentration</th>
<th>Mass</th>
<th>1 mg</th>
<th>5 mg</th>
<th>10 mg</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 mM</td>
<td></td>
<td>3.0886 mL</td>
<td>15.4431 mL</td>
<td>30.8861 mL</td>
</tr>
<tr>
<td></td>
<td>5 mM</td>
<td></td>
<td>0.6177 mL</td>
<td>3.0886 mL</td>
<td>6.1772 mL</td>
</tr>
<tr>
<td></td>
<td>10 mM</td>
<td></td>
<td>0.3089 mL</td>
<td>1.5443 mL</td>
<td>3.0886 mL</td>
</tr>
</tbody>
</table>

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

**BIOLOGICAL ACTIVITY**

**Description**

Lycorine (hydrochloride) is VE-cadherin inhibitor, and has IC50 of 1.2 \( \mu \)M in Hey1B cell. IC50: 1.2 \( \mu \)M (Hey1B cell)\[2\] In vitro: Lycorine (hydrochloride) executed an anti-melanoma vasculogenic effect by inhibiting VE-cadherin gene expression in C8161 cells and caused a decrease in cell surface exposure of VE-cadherin protein. Consistently, LH significantly suppressed VE-cadherin gene promoter activity. \[1\] Lycorine (hydrochloride) effectively inhibited mitotic proliferation of Hey1B cells (half maximal inhibitory concentration = 1.2 \( \mu \)M) with very low toxicity, resulting in cell cycle arrest at the G2/M transition through enhanced expression of the cell cycle inhibitor p21 and marked down-regulation of cyclin D3 expression. Moreover, LH suppressed both the formation of capillary-like tubes by Hey1B cells cultured in vitro. \[2\] In vivo: Lycorine effectively suppressed C8161 cell-dominant tumor formation and generation of tumor blood vessels in vivo with low toxicity. \[1\] Lycorine (hydrochloride) suppressed the formation of the ovarian cancer cell-dominant neovascularization in vivo when administered to Hey1B-xenotransplanted mice, suggest that LH selectively inhibits ovarian cancer cell proliferation and neovascularization and is a potential drug candidate for anti-ovarian cancer therapy. \[2\]
REFERENCES
