**Dolastatin 10**

Cat. No.: HY-15580  
CAS No.: 110417-88-4  
Molecular Formula: C₄₂H₆₈N₆O₆S  
Molecular Weight: 785.09  
Target: Microtubule/Tubulin; ADC Cytotoxin  
Pathway: Cell Cycle/DNA Damage; Cytoskeleton; Antibody-drug Conjugate/ADC Related  
Storage: Powder  
-80°C 2 years  
-20°C 1 year  

* The compound is unstable in solutions, freshly prepared is recommended.

**SOLVENT & SOLUBILITY**

<table>
<thead>
<tr>
<th>Solvent</th>
<th>Mass (mL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DMSO : ≥ 100 mg/mL (127.37 mM)</td>
<td>1 mg</td>
</tr>
<tr>
<td>1 mM</td>
<td>1.2737 mL</td>
</tr>
<tr>
<td>5 mM</td>
<td>0.2547 mL</td>
</tr>
<tr>
<td>10 mM</td>
<td>0.1274 mL</td>
</tr>
</tbody>
</table>

* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions  

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

**BIOLOGICAL ACTIVITY**

**Description**  
Dolastatin 10 (DLS 10) is a potent antimitotic peptide, isolated from the marine mollusk Dolabela auricularia, that inhibits tubulin polymerization.

**IC₅₀ & Target**  
Auristatin

**In Vitro**  
Dolastatin 10 is a unique pentapeptide that isolated from the sea hare Dolabella auricularia. These in vitro data are quite comparable to those of Dolastatin 10 and Auristatin PE, each of which has GI₅₀ values of 10⁻⁵ - 10⁻⁶ μg/mL (10⁻² - 10⁻³ nM) against a similar minipanel of human cell lines[2]. The antibody-drug conjugate (ADC) comprises the anti-CD30 monoclonal antibody cAC10 conjugated to the cytotoxic agent monomethyl auristatin E (MMAE), a synthetic analog of the tubulin polymerization inhibitor Dolastatin 10[3].  

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

**REFERENCES**

Product Data Sheet  
Inhibitors  
• Agonists  
• Screening Libraries  

www.MedChemExpress.com
