1. PHYSICAL AND CHEMICAL PROPERTIES

   **Batch Molecular Formula:** \( C_{28}H_{54}N_8.8HCl.6.5H_2O \)

   **Batch Molecular Weight:** 911.61

   **Physical Appearance:** White solid

   **Solubility:** water to 100 mM

   **Storage:** Store at -20°C

   **Batch Molecular Structure:**

2. ANALYTICAL DATA

   **\(^1\)H NMR:** Consistent with structure

   **Mass Spectrum:** Consistent with structure

   **Microanalysis:**

<table>
<thead>
<tr>
<th>Carbon</th>
<th>Hydrogen</th>
<th>Nitrogen</th>
<th>Chlorine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theoretical</td>
<td>36.89</td>
<td>8.29</td>
<td>12.29</td>
</tr>
<tr>
<td>Found</td>
<td>36.2</td>
<td>8.31</td>
<td>11.9</td>
</tr>
</tbody>
</table>

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use
Description:
AMD 3100 octahydrochloride is a highly selective CXCR4 chemokine receptor antagonist (IC₅₀ values are 0.02 - 0.13 and > 25 μM for CXCR4 and most other chemokine receptors, respectively). Also CXCR7 allosteric agonist. Switches inflammatory responses from Th2 to Th1 type and reduces airway hyperresponsiveness in a mouse model of asthma. Potently inhibits HIV-1 and HIV-2 replication in vitro (EC₅₀ = 4 - 35 nM) and mobilizes hematopoietic stem cells in vivo. Attenuates cocaine place preference and locomotor stimulation in rats. Attenuates microglial activation neurological function after ischemic stroke in mice. Inhibits tumor cell migration... Please see product specific page on www.tocris.com for full description.

Physical and Chemical Properties:
Batch Molecular Formula: C₂₈H₅₄N₈·8HCl·6.5H₂O
Batch Molecular Weight: 911.61
Physical Appearance: White solid

Storage: Store at -20°C

Solubility & Usage Info:
water to 100 mM
CAUTION - This product is hygroscopic and we recommend that it is desiccated upon arrival.

Stability and Solubility Advice:
Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. *Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquotted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References: