Product Data Sheet

<table>
<thead>
<tr>
<th>Product Name:</th>
<th>Naloxone hydrochloride</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS No.:</td>
<td>357-08-4</td>
</tr>
<tr>
<td>Cat. No.:</td>
<td>HY-17417</td>
</tr>
<tr>
<td>MWt:</td>
<td>363.84</td>
</tr>
<tr>
<td>Formula:</td>
<td>C19H22ClNO4</td>
</tr>
<tr>
<td>Purity:</td>
<td>&gt;98%</td>
</tr>
</tbody>
</table>

**Solubility:**
- DMSO: 73 mg/mL
- Water: 73 mg/mL
- Ethanol: <1 mg/mL

**Mechanisms:**
- Pathways: GPCR/G protein; Target: Opioid Receptor
- Pathways: Neuronal Signaling; Target: Opioid Receptor

**Biological Activity:**
Naloxone Hcl is a widely used opioid antagonist with an IC50 value of 3 nM (antagonized ACTH stimulation of cortisol).
- IC50 Value: 3 nM
- Target: Opioid receptor
- Opioid-related constipation is one of the most frequent side effects of chronic pain treatment.
- Enteral administration of naloxone blocks opioid action at the intestinal receptor level but has low systemic bioavailability due to marked hepatic first-pass metabolism[4].

**in vitro:** The crystal structure of anhydrous naloxonehydrochloride forms one-dimensional chains through hydrogen bonds. Compound crystallize in the orthorhombic space group P2(1)2(1)2(1) with lattice parameters of a = 14.6588(10) Å, b = 17.4363(9) Å, c = 7.96200(22) Å, and V = 2035.06(23) Å(3) for naloxone hydrochloride[2].

**in vivo:** animals received an intravenous bolus of either naloxone (2.0 mg/kg with constant infusion of 1.7 mg/kg/h, n = 8..."

**References:**
[5]. Izquierdo I, Dias RD. Effect of ACTH, epinephrine, beta-endorphin, naloxone, and of the combination of naloxone ...

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**Caution:** Not fully tested. For research purposes only

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