CYP17 inhibitor Abiraterone (CB-7598)

**Chemical Name:** (3S,8R,9S,10R,13S,14S)-10,13-dimethyl-17-(pyridin-3-yl)-2,3,4,7,8,9,10,11,12,13,14,15-dodecahydro-1H-cyclopenta[a]phenanthren-3-ol

<table>
<thead>
<tr>
<th>Molecular Weight:</th>
<th>349.51</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formula:</td>
<td>C_{24}H_{31}NO</td>
</tr>
<tr>
<td>Purity:</td>
<td>≥98%</td>
</tr>
<tr>
<td>CAS#:</td>
<td>154229-19-3</td>
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<tr>
<td>Solubility:</td>
<td>DMSO up to 20mM</td>
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| Storage           | Powder: 4°C 1 year  
DMSO: 4°C 3 month  
-20°C 1 year |

**Biological Activity:**

Abiraterone is the first-in-class potent and selective CYP17 (cytochrome P450 17alpha-hydroxylase-17,20-lyase) inhibitor with IC_{50} ~4 nM. It was approved by US FDA in 2011 to treat castration-resistant prostate cancer. As prostate cancer cells proliferate in response to androgen steroids, CYP17 inhibition is a new strategy to prevent androgen synthesis and treat lethal metastatic prostate cancer. In recent Nature publication, the structures of cytochrome P450 17A1 with abiraterone was released. A phase I/II clinical trial evaluating abiraterone in advanced breast cancer patients is also underway.

**How to Use:**

**In vitro:** Abiraterone is typically used at 1 µM concentration in vitro.

**In vivo:** Abiraterone acetate (pro-drug) was dosed to mice and rats at 50 mg/kg orally once per day.

**Reference:**


Products are for research use only. Not for human use.