

# JDTic

**Catalog No: tcsc0537**



## Available Sizes

**Size:** 5mg

**Size:** 10mg

**Size:** 50mg



## Specifications

**CAS No:**

361444-66-8

**Formula:**

$C_{28}H_{39}N_3O_3$

**Pathway:**

GPCR/G Protein; Neuronal Signaling

**Target:**

Opioid Receptor; Opioid Receptor

**Purity / Grade:**

>98%

**Solubility:**

10 mM in DMSO

**Observed Molecular Weight:**

465.63

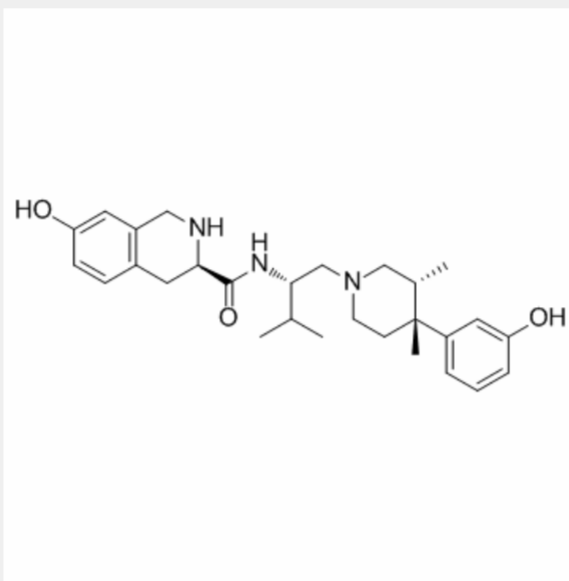
## Product Description

JDTic is a highly selective antagonist for the  $\kappa$ -opioid receptor; without affecting the  $\mu$ - or  $\delta$ -opioid receptors.

IC50 value:

Target:  $\kappa$ -opioid receptor

JDTic is a 4-phenylpiperidine derivative, distantly structurally related to analgesic drugs such as meperidine and ketobemidone, and more closely to the mu opioid antagonist alvimopan, and is structurally distinct from other kappa antagonists such as norbinaltorphimine. JDTic has a very long duration of action, with effects in animals seen for up to several weeks after administration of a single dose, although its binding to the kappa opioid receptor is not irreversible and its long-acting effects are instead caused by altered activity of c-Jun N-terminal kinases. Animal studies suggest that it may produce antidepressant and anxiolytic effects, as well as having possible application in the treatment of addiction to cocaine and morphine.



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!