

Ropivacaine hydrochloride

Catalog No: tcsc0013146



Available Sizes

Size: 10mg

Size: 50mg



Specifications

CAS No:

98717-15-8

Formula:

$C_{17}H_{27}ClN_2O$

Pathway:

Membrane Transporter/Ion Channel

Target:

Potassium Channel

Purity / Grade:

>98%

Solubility:

10 mM in DMSO

Observed Molecular Weight:

310.86

Product Description

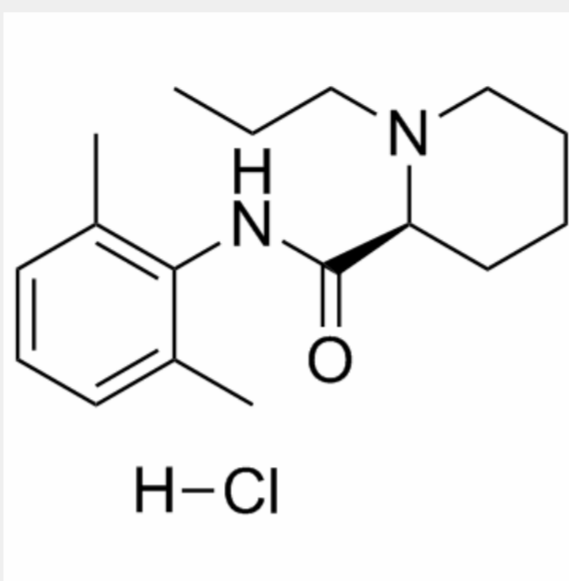
Ropivacaine hydrochloride is an inhibitor of **K_{2P}** (two-pore domain potassium channel) **TREK-1** with an **IC₅₀** of 402.7 μ M.

IC50 & Target: IC50: 402.7 μ M (K_{2P} TREK-1)^[1]

In Vitro: Ropivacaine hydrochloride shows reversible inhibition of TREK-1 channels in a concentration-dependent manner. The half-maximal inhibitory concentrations (IC₅₀) of Ropivacaine hydrochloride is 402.7 \pm 31.8 μ M.. Hill coefficient is 0.89 for Ropivacaine

hydrochloride^[1].

In Vivo: Epidural injections of Ropivacaine hydrochloride (60, 180 and 600 µg) produce immediate and reversible motor paralysis. The motor blockade effect is dose-dependent, with paralysis duration of 4.6, 14.6 and 29.5 mins, respectively. Epidural Ropivacaine hydrochloride sustained release suspension also produces significant blockade of mechanical allodynia and thermal hyperalgesia by 59.5% and 70.9%, respectively (P[2]).



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