Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

# SB 271046 (Hydrochloride)

## Catalog No: tcsc0634

### Available Sizes

**Size:** 10mg

**Size:** 50mg

### Specifications

**CAS No:**
209481-24-3

**Formula:**
$C_{20}H_{23}Cl_2N_3O_3S_2$

**Pathway:**
Neuronal Signaling;GPCR/G Protein

**Target:**
5-HT Receptor;5-HT Receptor

**Purity / Grade:**
>98%

**Solubility:**
DMSO : 50 mg/mL (102.36 mM; Need ultrasonic)

**Alternative Names:**
SB 271046A

**Observed Molecular Weight:**
488.45

## Product Description

SB271046 Hcl is a potent, selective and orally active 5-HT6 receptor antagonist with pKi of 8.9.

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IC50 Value: 8.9(pKi)

Target: 5-HT6 Receptor

in vitro: SB 271046 hydrochloride is a sulfonamidal benzothiophene derivative that has been shown to act as a selective 5-HT6 antagonist with pKi values of 9.02-8.92, 6.55, 6.35, 6.27, 6.05, 5.95, 5.76, 5.73, 5.62, 5.55, 5.41, 5.39, 5.27 and 200-fold selective over 55 other receptors, enzymes and ion channels.

in vivo: SB-271046 is moderately brain penetrant (10%), subject to low blood clearance (7.7 mL/min/kg) with a good half-life in rats (4.8 hours), and has excellent oral bioavailability (>80%). SB-271046 produces 3-fold and 2-fold increases in extracellular glutamate levels in both frontal cortex and dorsal hippocampus of rats, respectively, which may be used for the treatment of cognitive and memory dysfunction. SB-271046 (20 mg/kg, orally gavage) 30 min prior to training Wistar rats, is found to reverse significantly the amnesia produced by administering scopolamine (0.8 mg/kg, i.p.) in the 6 hours post-training period. SB-271046 progressively and significantly decreases platform swim angle and escape latencies over the five sequential trials on four consecutive daily sessions compared to vehicle-treated controls in aged rats. SB-271046 also improves task recall as measured by significant increases in the searching of the target quadrant on post-training days 1 and 3. SB-271046 (10 mg/kg, s.c.) produces a significant, tetrodotoxin-dependent, increase in extracellular levels of both glutamate and aspartate within the frontal cortex of rats, reaching maximum values of 375.4% and 215.3% of preinjection values, respectively.