

# BPR1J-097 Hydrochloride

Catalog No: tcsc0040547



## Available Sizes

**Size:** 5mg

**Size:** 10mg

**Size:** 50mg

**Size:** 100mg



## Specifications

**Formula:**

$C_{27}H_{29}ClN_6O_3S$

**Pathway:**

Protein Tyrosine Kinase/RTK

**Target:**

FLT3

**Purity / Grade:**

>98%

**Solubility:**

DMSO : 6 mg/mL (10.85 mM; Need ultrasonic and warming)

**Observed Molecular Weight:**

553.08

## Product Description

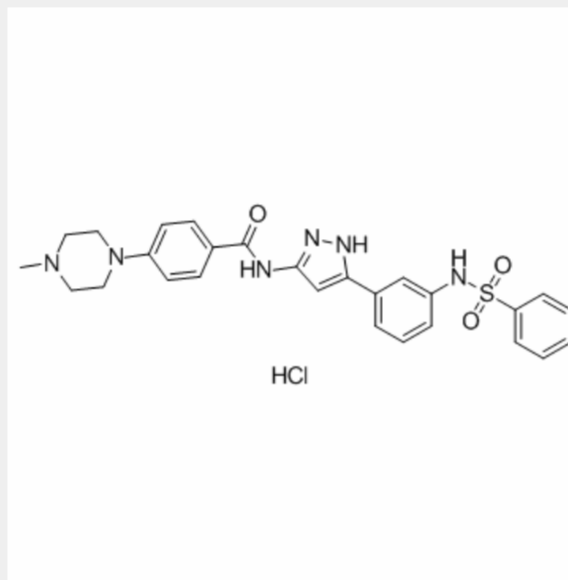
BPR1J-097 Hydrochloride is a novel and potent **FLT3** inhibitor with an **IC<sub>50</sub>** of 11 nM.

IC50 & Target: IC50: 11 nM (FLT3)<sup>[1]</sup>

**In Vitro:** BPR1J-097 Hydrochloride is a novel and potent FLT3 inhibitor with an IC<sub>50</sub> of 11nM. Phosphorylation of all FLT3-WT, FLT3-

IDT, and FLT3-D835Y are inhibited by BPR1J-097 Hydrochloride at a concentration as low as 10 nM. BPR1J-097 Hydrochloride suppresses the phosphorylation of FLT3 and STAT5 in a dose-dependent manner. The  $IC_{50}$  values of BPR1J-097 Hydrochloride on MOLM-13 and MV4-11 cells are  $21 \pm 7$  and  $46 \pm 14$  nM, respectively. The emergence of active caspase-3 is observed in MOLM-13 cells treated with BPR1J-097 Hydrochloride at 10 nM. The effect of BPR1J-097 Hydrochloride seems to be weaker in MV4-11 cells as caspase-3 is not evident until 100 nM of BPR1J-097 Hydrochloride is applied to treat cells<sup>[1]</sup>.

**In Vivo:** After i.v. administration of mice with BPR1J-097 Hydrochloride at two cycles of 10 or 25 mg/kg, a clear dose-dependent anti-tumour effect is observed. Tumours in mice treated with BPR1J-097 Hydrochloride (25 mg/kg per day) stop growing. BPR1J-097 Hydrochloride (25 mg/kg) shows a significant tumour shrinkage effect on the subcutaneously growing MOLM-13 tumours in a size of  $>2000 \text{ mm}^3$ . BPR1J-097 Hydrochloride (10 and 25 mg/kg) also produces a dose-dependent growth reduction and shrinkage of another model using MV4-11 cells. It is noted that a prolonged disappearance of MV4-11 tumours is observed in mice treated with BPR1J-097 Hydrochloride at 25 mg/kg. There is little (3%) or no body weight loss of BPR1J-097 Hydrochloride-treated nude mice during the observation periods in these *in vivo* studies<sup>[1]</sup>.



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