

# NSC23925

Catalog No: **tcsc0016032**



## Available Sizes

**Size:** 5mg

**Size:** 10mg

**Size:** 25mg



## Specifications

**CAS No:**

858474-14-3

**Formula:**

$C_{22}H_{26}Cl_2N_2O_2$

**Pathway:**

Membrane Transporter/Ion Channel

**Target:**

P-glycoprotein

**Purity / Grade:**

>98%

**Solubility:**

10 mM in DMSO

**Observed Molecular Weight:**

421.36

## Product Description

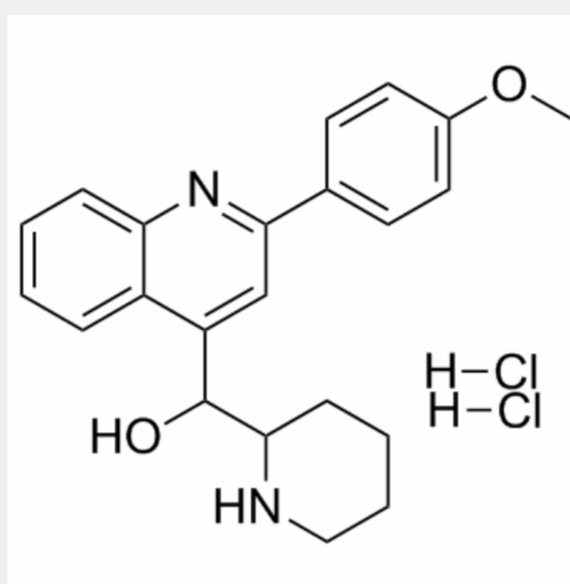
NSC23925 is a novel, selective and effective **P-glycoprotein (Pgp)** inhibitor.

IC50 & Target: P-glycoprotein<sup>[1]</sup>

**In Vitro:**

NSC23925 is a novel, selective and effective P-glycoprotein (Pgp) inhibitor. SKOV-3 cells with long-term exposure of 1  $\mu\text{M}$  NSC23925 show stable growth in culture medium. NSC23925 specifically inhibits Pgp overexpression to prevent the emergence of paclitaxel resistance during paclitaxel treatment<sup>[1]</sup>. NSC23925 reverses chemoresistance in a wide variety of tumor types where Multidrug resistance 1 (MDR1) is highly expressed. Maximal reversal of MDR is typically seen in NSC23925 doses between 0.5 and 1  $\mu\text{M}$ . The  $\text{IC}_{50}$  for NSC23925 is 8  $\mu\text{M}$  in SKOV-3/SKOV-3<sub>TR</sub> and 25  $\mu\text{M}$  in OVCAR8/OVCAR8<sub>TR</sub> cell lines, whereas the mean concentration of NSC23925 required for maximal reversal of resistance in SKOV-3<sub>TR</sub> or OVCAR8<sub>TR</sub> to cytotoxic drugs is 0.5  $\mu\text{M}$  to 1  $\mu\text{M}$ <sup>[2]</sup>.

**In Vivo:** Both saline alone and NSC23925 alone treated tumors grow progressively. The usage of NSC23925 in paclitaxel chemotherapy significantly prolongs anticancer efficacy of paclitaxel<sup>[1]</sup>.



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