

## Product Data Sheet

Product Name: M-110  
Cat. No.: GC34138

### Chemical Properties

Cas. No. 1395048-49-3

SMILES O=C(N/N=C(C1=CC=C(C(Cl)=C1O)\CC)C2=CC(NCCCN3CCOCC3)=NC=C2

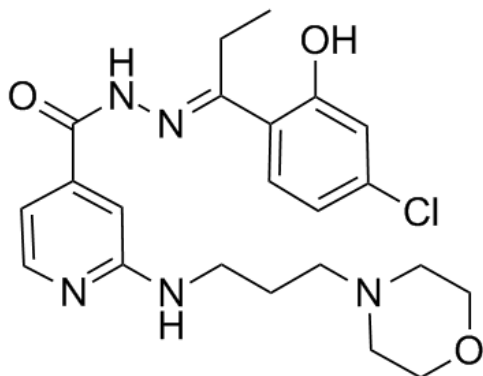
Formula C22H28ClN5O3 M.Wt 445.94

Solubility Soluble in DMSO Storage Store at -20°C

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution: ship with blue ice. All other available size: ship with RT, or blue ice upon request.

### Structure



### Background

**Caution: Product has not been fully validated for medical applications. For research use only.**

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Address: 10292 Central Ave. #205, Montclair, CA, USA

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M-110 is a novel and highly selective inhibitor of PIM kinases; inhibits the proliferation of prostate cancer cell lines with IC<sub>50</sub>s of 0.6 to 0.9  $\mu$ M, with no activity on normal human peripheral blood mononuclear cells up to 40  $\mu$ M. IC<sub>50</sub> value: Target: Pim inhibitor in vitro: Treatment of DU-145 cells with M-110 or with a structurally unrelated PIM inhibitor, SGI-1776, significantly reduces pSTAT3Tyr705 expression without affecting the expression of STAT3. Furthermore, treatment of DU-145 cells with M-110 attenuates the interleukin-6-induced increase in pSTAT3Tyr705 [1]. M-110 treatment of APC-mutant DLD-1 cells, preferentially attenuated constitutive TOPFLASH activity as compared with FOPFLASH, and had no effect on the CMV- $\beta$ -galactosidase control reporter. In SW480 cells, M-110 also decreased the levels of free cytoplasmic  $\beta$ -catenin as determined by E-cadherin pull down assays. M-110 also blocked Wnt signaling when other destruction complex components were disrupted, including abrogation of AXIN1/2 expression using siRNAs or inhibition of GSK3 $\beta$  activity using LiCl or I3M [2].

[1]. He Y, et al. Schisantherin A suppresses osteoclast formation and wear particle-induced osteolysis via modulating RANKL signaling pathways. *Biochem Biophys Res Commun*. 2014 Jul 4;449(3):344-50. [2]. Zhou E, et al. Schisantherin A protects lipopolysaccharide-induced acute respiratory distress syndrome in mice through inhibiting NF- $\kappa$ B and MAPKs signaling pathways. *Int Immunopharmacol*. 2014 Sep;22(1):133-40. [3]. Sa F, et al. Discovery of novel anti-parkinsonian effect of schisantherin A in in vitro and in vivo. *Neurosci Lett*. 2015 Apr 23;593:7-12. [4]. Zhang LQ, et al. Schisantherin A protects against 6-OHDA-induced dopaminergic neuron damage in zebrafish and cytotoxicity in SH-SY5Y cells through the ROS/NO and AKT/GSK3 $\beta$  pathways. *J Ethnopharmacol*. 2015 Apr 29. pii: S0378-8741(15)00306-2.

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