

# SGI-1776

Catalog No: tcsc0513



## Available Sizes

**Size:** 5mg

**Size:** 10mg

**Size:** 50mg



## Specifications

**CAS No:**

1025065-69-3

**Formula:**

$C_{20}H_{22}F_3N_5O$

**Pathway:**

JAK/STAT Signaling;Autophagy

**Target:**

Pim;Autophagy

**Purity / Grade:**

>98%

**Solubility:**

DMSO : 125 mg/mL (308.32 mM; Need ultrasonic)

**Observed Molecular Weight:**

405.42

## Product Description

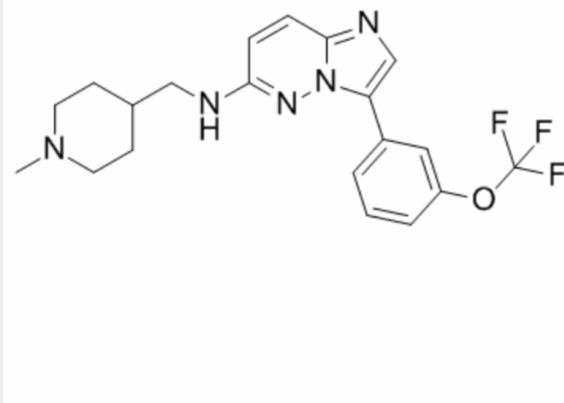
SGI-1776 is an inhibitor of **Pim** kinases, with **IC<sub>50</sub>** of 7 nM, 363 nM, and 69 nM for Pim-1, -2 and -3, respectively.

IC50 & Target: Ki: 7 nM (Pim-1), 363 nM (Pim-2), 69 nM (Pim-3)<sup>[4]</sup>

**In Vitro:**

SGI-1776 (2.5, 5  $\mu$ M) inhibits Pim-1 protein expression and Pim-1 kinase activity in SACC cells. SGI-1776 (2.5, 5  $\mu$ M) causes cell cycle arrest and reduces cell proliferation in SACC-83 and SACC-LM cells. SGI-1776 (5  $\mu$ M) inhibits cell migration and invasiveness in both SACC-83 and SACC-LM cells. SGI-1776 (0, 2.5, or 5  $\mu$ M) induces apoptosis via Caspase-3 activation<sup>[1]</sup>. SGI-1776 (5  $\mu$ M) exerts inhibitory effects on both lipid accumulation and TG synthesis without affecting the number of adipocytes. SGI-1776 (5  $\mu$ M) inhibits adipogenesis particularly at an early phase of differentiation. SGI-1776 (5  $\mu$ M) decreases the expression of C/EBP- $\alpha$  and PPAR- $\gamma$  and the phosphorylation levels of STAT-3 during adipocyte differentiation, and downregulates the protein and/or mRNA expression of FAS, leptin and RANTES during adipocyte differentiation<sup>[2]</sup>. SGI-1776 shows the significant activity against HO-8910 cells in a dose-dependent manner, with  $IC_{50}$  of (5.2 $\pm$ 0.6)  $\mu$ M, and the inhibiting effect of SGI-1776 is sharply increased from 1.25  $\mu$ M to 20  $\mu$ M in vitro. SGI-1776 inhibits the migration and invasion of HO-8910 cells in a dose-dependent manner, and the inhibiting migration and invasion rate of 5  $\mu$ M. SGI-1776 (2.5, 5 and 10  $\mu$ M) decreases Pim-1 kinase activity of HO-8910 cells in a dose-dependent manner. Furthermore, the down-regulation of Pim-1 expression by SGI-1776 significantly inhibits cell viability, arrests cell in G1 phase, and inhibits the migration and invasion<sup>[3]</sup>.

**In Vivo:** SGI-1776 (75, 200 mg/kg, p.o.) shows potent and sustained antitumor activity in a dose dependent manner in MV-4-11 xenografts<sup>[4]</sup>.



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