

# Momelotinib

Catalog No: tcsc0053



## Available Sizes

**Size:** 5mg

**Size:** 10mg

**Size:** 50mg

**Size:** 100mg

**Size:** 200mg



## Specifications

**CAS No:**

1056634-68-4

**Formula:**

$C_{23}H_{22}N_6O_2$

**Pathway:**

Epigenetics;Stem Cell/Wnt;JAK/STAT Signaling;Autophagy

**Target:**

JAK;JAK;JAK;Autophagy

**Purity / Grade:**

>98%

**Solubility:**

DMSO :  $\geq 40$  mg/mL (96.51 mM)

**Alternative Names:**

CYT387

### Observed Molecular Weight:

414.46

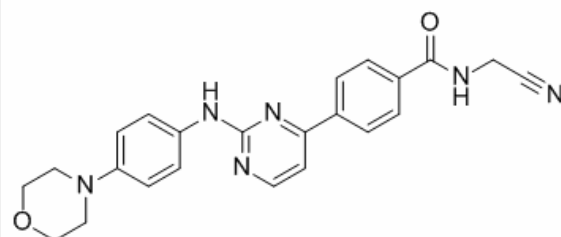
## Product Description

Momelotinib (CYT387) is an ATP-competitive inhibitor of **JAK1/JAK2** with **IC<sub>50</sub>** of 11 nM and 18 nM, respectively. CYT387 shows much less activity against JAK3.

IC50 & Target: IC50: 11 nM (JAK1), 18 nM (JAK2)

**In Vitro:** Momelotinib (CYT387) inhibits the proliferation of parental Ba/F3 cells (Ba/F3-wt) stimulated by IL-3 with IC<sub>50</sub> of 1400 nM. Furthermore, Momelotinib (CYT387) also causes the inhibition of cell proliferation in cell lines constitutively activated by JAK2 or MPL signaling, including Ba/F3-MPLW515L cells, CHRF-288-11 cells and Ba/F3-TEL-JAK2 cells with IC<sub>50</sub> of 200 nM, 1 nM and 700 nM, respectively. In addition, Momelotinib (CYT387) has been shown to inhibit erythroid colony growth in vitro from JAK2V617F-positive PV patients with similar potency with IC<sub>50</sub> of 2 μM-4 μM<sup>[1]</sup>. Momelotinib (CYT387) inhibits PI3K/AKT and Ras/MAPK signaling induced by IL-6 and IGF-1. Moreover, Momelotinib (CYT387) induces apoptosis as a single agent and synergizes with the conventional anti-MM therapies bortezomib and melphalan in primary multiple myeloma (MM) cells<sup>[2]</sup>.

**In Vivo:** In a murine MPN model, Momelotinib (CYT387) normalizes white cell counts, hematocrit, spleen size, and restores physiologic levels of inflammatory cytokines<sup>[3]</sup>.



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