# PTK7/β-catenin-IN-6

**Cat. No.:** HY-160493

**CAS No.:** 1219439-82-3

**Molecular Formula:** $C_{25}H_{19}Cl_2N_3O_3$

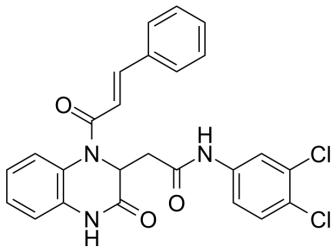
**Molecular Weight:** 480.34

**Target:** Wnt; β-catenin

**Pathway:** Stem Cell/Wnt

**Storage:** 4°C, protect from light

* In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



## SOLVENT & SOLUBILITY

**In Vitro**

DMSO : 73.33 mg/mL (152.66 mM; Need ultrasonic)

| Preparing Stock Solutions | Solvent / Mass / Concentration | 1 mg | 5 mg | 10 mg |
|---|---|---|---|---|
| | 1 mM | 2.0819 mL | 10.4093 mL | 20.8186 mL |
| | 5 mM | 0.4164 mL | 2.0819 mL | 4.1637 mL |
| | 10 mM | 0.2082 mL | 1.0409 mL | 2.0819 mL |

Please refer to the solubility information to select the appropriate solvent.

## BIOLOGICAL ACTIVITY

**Description**

PTK7/β-catenin-IN-6 (Compound 03653) is an inhibitor for PTK7/β-catenin interaction, which inhibits the Wnt signaling pathway, and exhibits an anticancer activity against colorectal cancer (CRC)[1].

**In Vitro**

PTK7/β-catenin-IN-6 (25 μM) misregulates the β-catenin responsive transcription and inihibits the Wnt signaling pathway through regulating the mRNA expressions of Wnt signaling related genes, which are associated with cell proliferation and migration[1].

PTK7/β-catenin-IN-6 (0-100 μM) arrests the cell cycle in G0/G1 phase through block of CyclinA2, CyclinE2 and CDK production, inhibits proliferations of HCT116, SW480 and MEF with $IC_{50}$s of 20.1, 19.6 and 46.3 μM, respectively[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Cell Proliferation Assay[1]

| | |
|---|---|
| Cell Line: | HCT116, SW480 and MEF |
| Concentration: | 0-100 μM |
| Incubation Time: | 24 h |

| | |
|---|---|
| Result: | Inhibited proliferations of cells HCT116, SW480 and MEF. |
| Western Blot Analysis[1] | |
| Cell Line: | HCT116, SW480 |
| Concentration: | 0-100 μM |
| Incubation Time: | 24 h |
| Result: | Decreased levels of CyclinA2, CyclinE2 and CDK. |
| RT-PCR[1] | |
| Cell Line: | HCT116, SW480 |
| Concentration: | 25 μM |
| Incubation Time: | 24 h |
| Result: | Increased mRNA levels of PLAUR, FOSL1 and NRP1.<br>Decreased mRNA levels of AXIN2. |

## REFERENCES

[1]. Ganier L, et al., Discovery of Small-Molecule Inhibitors of the PTK7/β-Catenin Interaction Targeting the Wnt Signaling Pathway in Colorectal Cancer. ACS Chem Biol. 2022 May 20;17(5):1061-1072.



Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA