Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

YM-155 (hydrochloride)

Catalog No: tcsc1150

Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Size: 100mg

Specifications

CAS No:
355406-09-6

Formula:
$C_{20}H_{19}ClN_4O_3$

Pathway:
Apoptosis;Autophagy

Target:
Survivin;Autophagy

Purity / Grade:
>98%

Solubility:
10 mM in DMSO

Observed Molecular Weight:
398.84

Product Description

YM-155 hydrochloride is a novel **survivin** suppressant with an **IC_{50}** of 0.54 nM for the inhibition of survivin promoter activity.

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IC50 & Target: IC50: 0.54 nM (survivin)

In Vitro: YM155 (30 μM) is not sensitive to survivn gene promoter-driven luciferase reporter activity. YM155 shows significant supression on endogenous survivin expression in PC-3 and PPC-1 human HRPC cells with deficient p53 via transcriptional inhibition of the survivin gene promoter. YM155 (100 nM) does not affect protein expression of c-IAP2, XIAP, Bcl-2, Bcl-xL, Bad, α-actin, and β-tubulin. YM155 potently inhibits human cancer cell lines (mutated or truncated p53) such as PC-3, PPC-1, DU145, TSU-Pr1, 22Rv1, SK-MEL-5 and A375 with IC_{50}s ranging from 2.3 to 11 nM, respectively[1]. YM155 resultin in an increase in sensitivity of NSCLC cells to γ-radiation. YM155 combined with γ-radiation increases both the number of apoptotic cells and the activity of caspase-3. In addition, YM155 delays the repair of radiation-induced double-strand breaks in nuclear DNA[2].

In Vivo: YM155 (3 and 10 mg/kg) inhibits the tumor growth in PC-3 xenografts, without obvious body weight loss and blood cell count decrease. YM155 is highly distributed to tumor tissue in vivo. YM155 shows 80% TGI at a dose of 5 mg/kg in PC-3 orthotopic xenografts[1]. YM155 in combination with γ-radiation shows potent antitumor activity against H460 or Calu6 xenografts in nude mice [2]. In this orthotopic renal and metastatic lung tumors models, YM155 and IL-2 additively decreases tumor weight, lung metastasis, and luciferin-stained tumor images[3].