

# 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

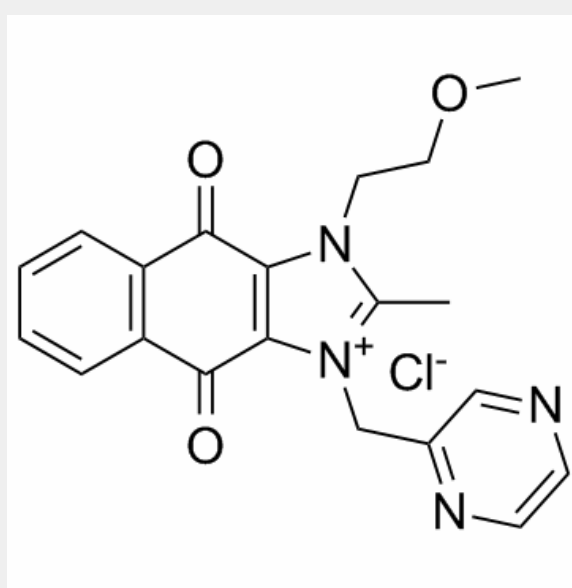
## Product Description

YM-155 hydrochloride is a novel **survivin** suppressant with an **IC<sub>50</sub>** of 0.54 nM for the inhibition of survivin promoter activity.

IC50 & Target: IC50: 0.54 nM (survivin)

**In Vitro:** YM155 (30  $\mu$ M) is not sensitive to survivin gene promoter-driven luciferase reporter activity. YM155 shows significant suppression 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,  $\alpha$ -actin, and  $\beta$ -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<sub>50</sub>s ranging from 2.3 to 11 nM, respectively<sup>[1]</sup>. YM155 results in an increase in sensitivity of NSCLC cells to  $\gamma$ -radiation. YM155 combined with  $\gamma$ -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<sup>[2]</sup>.

**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<sup>[1]</sup>. YM155 in combination with  $\gamma$ -radiation shows potent antitumor activity against H460 or Calu6 xenografts in nude mice<sup>[2]</sup>. In this orthotopic renal and metastatic lung tumors models, YM155 and IL-2 additively decreases tumor weight, lung metastasis, and luciferin-stained tumor images<sup>[3]</sup>.



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