

# Tasidotin hydrochloride

Catalog No: tcsc6540



## Available Sizes

**Size:** 1mg

**Size:** 5mg

**Size:** 10mg

**Size:** 20mg



## Specifications

**CAS No:**

623174-20-9

**Formula:**

$C_{32}H_{59}ClN_6O_5$

**Pathway:**

Cell Cycle/DNA Damage;Cytoskeleton

**Target:**

Microtubule/Tubulin;Microtubule/Tubulin

**Purity / Grade:**

>98%

**Solubility:**

10 mM in DMSO

**Alternative Names:**

ILX651

**Observed Molecular Weight:**

643.3

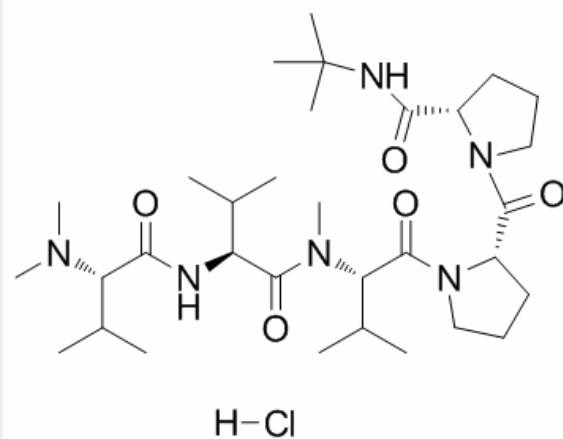
## Product Description

Tasidotin hydrochloride is a peptide analog of the antimitotic depsipeptide dolastatin 15, as an inhibitor of microtubule assembly and microtubule dynamics.

IC<sub>50</sub> & Target: Microtubule<sup>[1]</sup>

**In Vitro:** Compared with other breast carcinoma lines, relatively low amounts of Tasidotin enters NCI/ADR-RES cells, consistent with Tasidotin's also being a P-glycoprotein substrate. Of the remaining lines, the greatest difference in sensitivity to Tasidotin is between the more sensitive MDA-MB-435 line and the less sensitive HS 578-T line. The IC<sub>50</sub> values in the two lines are 4 and 200 nM, respectively<sup>[1]</sup>. The IC<sub>50</sub> in Ewing's sarcoma, rhabdomyosarcoma, osteosarcoma, and synovial sarcoma lines ranges from 2 to 320 nM. In the SK-ES1 and RH30 cell lines, Tasidotin induces a G<sub>2</sub>-M arrest that persists for 48 h after Tasidotin is washed from the cells. In vitro, more than half the cells are in the early or late phase of apoptosis 48 h after treatment with Tasidotin. Following treatment for 24 h with 160 nM Tasidotin, the RH30 line and SK-ES1 line each shows an accumulation of cells in the G<sub>2</sub>-M phase. At hour 24, nearly all the RH30 cells are in the G<sub>2</sub>-M phase<sup>[2]</sup>.

**In Vivo:** In vivo, a significant increase in apoptotic nuclei is apparent in xenograft tumors harvested within 24 h after a 5-day course of Tasidotin. Mice treated with 100 mg/kg have a mean weight loss of >20% with no return to their baseline starting weight, and one mouse dies before the second treatment course. The mice treated with 90 mg/kg/d Tasidotin have a mean weight loss of [2].



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