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

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

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Product Description

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

IC50 & Target: Microtubule[1]

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_{50} values in the two lines are 4 and 200 nM, respectively[1]. The IC_{50} 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_2-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_2-M phase. At hour 24, nearly all the RH30 cells are in the G_2-M phase[2].

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].