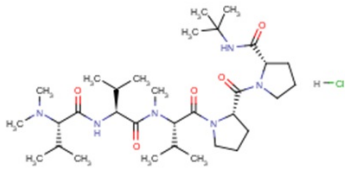
Data Sheet (Cat.No.T16997)

TargetMol
A DRUG SCREENING EXPERT

Tasidotin hydrochloride

Chemical Properties



CAS No.:	623174-20-9
Formula:	C32H59ClN6O5
Molecular Weight:	643.3
Appearance:	N/A
Storage:	0-4℃ for short term (days to weeks), or -20℃ for long term (months).

Biological Description

Description	Tasidotin hydrochloride is a peptide analog of the antimitotic depsipeptide dolastatin 15. Tasidotin hydrochloride is an inhibitor of microtubule assembly and microtubule dynamics.
Targets(IC_{50})	Microtubule: None
In vitro	The greatest difference in sensitivity to Tasidotin is between the more sensitive MDA-MB-435 line and the less sensitive HS 578-T line of the remaining lines. The IC50 values in the two lines are 4 and 200 nM, respectively. The IC50 in Ewing's sarcoma, rhabdomyosarcoma, osteosarcoma, and synovial sarcoma lines ranges from 2 to 320 nM. Tasidotin induces a G2-M arrest that persists for 48 h after Tasidotin is washed from the cells in the SK-ES1 and RH30 cell lines. 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 G2-M phase. At hour 24, nearly all the RH30 cells are in the G2-M phase [1][2].
In vivo	Tasidotin (90 mg/kg/d, mice) treatment has a mean weight loss of <16% following each 5-day treatment of Tasidotin. 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 [2].

Solubility Information

Solubility	< 1 mg/ml refers to the product slightly soluble or insoluble

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.554 mL	7.772 mL	15.545 mL
5 mM	0.311 mL	1.554 mL	3.109 mL
10 mM	0.155 mL	0.777 mL	1.554 mL
50 mM	0.031 mL	0.155 mL	0.311 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 ℃ for 6 months; - 20 ℃ for 1 month. Please use it as soon as possible.

Reference

1. Bai R, et al. Intracellular activation and deactivation of Tasidotin, an analog of dolastatin 15: correlation with cytotoxicity. Mol Pharmacol. 2009 Jan;75(1):218-26.

2. Garg V, et al. Preclinical analysis of Tasidotin HCl in Ewing's sarcoma, rhabdomyosarcoma, synovial sarcoma, and osteosarcoma. Clin Cancer Res. 2007 Sep 15;13(18 Pt 1):5446-54.

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