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

Birinapant

Catalog No: tcsc1719

Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Size: 100mg

Specifications

CAS No:
1260251-31-7

Formula:
$C_{42}H_{56}F_2N_8O_6$

Pathway:
Apoptosis

Target:
IAP

Purity / Grade:
>98%

Solubility:
DMSO : ≥ 40 mg/mL (49.57 mM); H2O :

Alternative Names:
TL32711

Observed Molecular Weight:
806.94

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Product Description

Birinapant a bivalent Smac mimetic, is a potent antagonist for **XIAP** and **cIAP1** with $\mathbf{K_d}$ values of 45 nM and
IC50 & Target: Kd: 45 nM (XIAP),
In Vitro: Birinapant causes significant degradation of cIAP1 and 2. Birinapant + TRAIL-treated cells show increased levels of active caspase-8 and caspase-3, as well as PARP cleavage, over single agents within 4 h of treatment, indicative of apoptosis-mediated cell death. Birinapan significantly decreases the viability of SUM190 cells in a dose-dependent manner. Birinapant treatment in the XIAP knockdown cell line (SUM190 shXIAP) causes an overall reduction in viability at lower doses (30-300 nM)[1]. Birinapant causes apoptosis in the sensitive cells. Birinapant in conbination with TNF-α, causes PARP cleavage in 451Lu and WM1366 cell lines[2]. Birinapant induces time-course of caspase-3 activation in HCT116 human colon carcinoma and MDA-MB-231 human breast adenocarcinoma cells[3].

In Vivo: Birinapant can inhibit tumor growth in melanoma xenotransplantation models. Staining for activated caspase-3 in biopsies of the same tumors show a modest increase in apoptotic cells in the birinapant treated animals[2]. Birinapant (15 mg/kg, i.p.) induces apoptosis in HCT116 tumor-bearing mouse[3].