

BV6

Catalog No: tcsc3340



Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Size: 100mg



Specifications

CAS No:

1001600-56-1

Formula:

$C_{70}H_{96}N_{10}O_8$

Pathway:

Apoptosis

Target:

IAP

Form:

White to off-white (Solid)

Purity / Grade:

99.84%

Solubility:

DMSO : ≥ 58 mg/mL (48.11 mM)

Storage Instruction:

Powder : -20°C for 3 years; 4°C for 2 years In solvent: -80°C for 6 months ; -20°C for 1 month

Alternative Names:

L-Phenylalaninamide, 4,4'-(1,6-hexanediyl)bis[N-methyl-L-alanyl-(2S)-2-cyclohexylglycyl-Lprolyl-β-phenyl]

Observed Molecular Weight:

1205.57

References

[1]. Li W, et al. BV6, an IAP antagonist, activates apoptosis and enhances radiosensitization of non-small cell lung carcinoma in vitro. J Thorac Oncol. 2011 Nov;6(11):1801-9. [2]. Uegaki T, et al. Inhibitor of apoptosis proteins (IAPs) may be effective therapeutic targets for treating endometriosis. Hum Reprod. 2015 Jan;30(1):149-58.

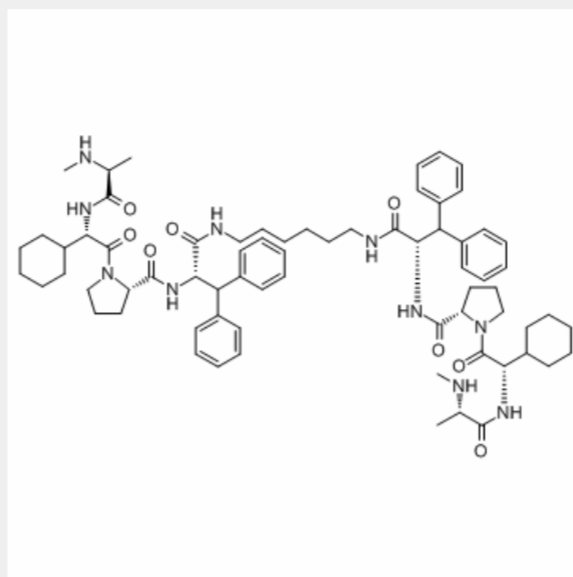
Product Description

BV6 is an antagonist of **clAP1** and **XIAP**, members of the inhibitors of apoptosis (IAP) family.

IC50 & Target: IAP^[1]

In Vitro: HCC193 has an IC₅₀ of 7.2 μM in MTS assays, while H460 cells are not reduced to 50% viability even with 30 μM BV6 treatment. Administration of 1 μM BV6 to HCC193 cells induces complete depletion of clAP1 levels at 1 hour post-treatment, while a decrease in XIAP levels is not seen until 24 hours following addition of drug. Similarly, 5 μM BV6 fully depletes clAP1 at 1 hour and begin to reduce XIAP at 24 hours in H460 cells. In parallel findings, clAP1 levels are decreased in response to a small dose of 0.25 μM BV6 in both cell lines, whereas trace amounts of XIAP are still present at 5μM BV6. HCC193 cells demonstrates noticeable cleaved caspase-3 levels beginning 12 hours post-incubation with 1μM BV6, and cleaved caspase-3 levels continued to increase in a time-dependent manner over 48 hours. Treatment of HCC193 cells with 1 μM BV6 for 24 hours causes a significant survival curve shift in HCC193 cells relative to DMSO-treated cells, with a DER=1.38 (p[1]. BV6 (2 and 5 μM) significantly represses BrdU incorporation in ectopic and eutopic (disease-free and myomas) ESCs. An ~30% decrease of BrdU incorporation is observed in both groups after treatment with 5 μM BV6^[2].

In Vivo: Murine clAP-1, clAP-2 and XIAP expressions are clearly observed in the cytoplasm of both epithelial and stromal cells of implants, whereas Survivin is mainly expressed in the nuclei BV6 treatment for 4 weeks attenuated the intensity of IAPs expression. The size of lesions range from ~2 to 7 mm in diameter. The monolayer epithelial cell lining of the cyst is shown. After immunohistochemical staining, cytokeratin and vimentin are positively stained, whereas calretinin is negative. After BV6 treatment for 4 weeks, the total number of lesions (4.6 versus 2.8/mouse), the average weight (78.1 versus 32.0 mg/mouse) and the surface area (44.5 versus 24.6 mm²/mouse) of lesions are significantly less than in the controls. In the endometrial gland epithelia or stroma, the percentage of Ki67-positive cells decreases after BV6 treatment^[2].



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