

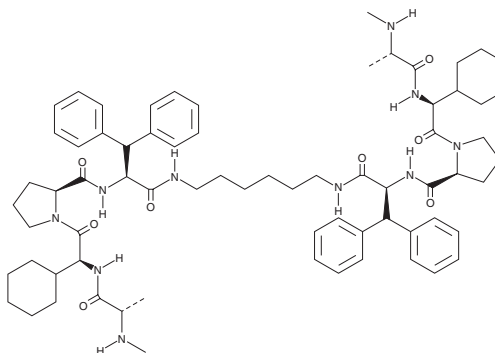
# PRODUCT INFORMATION



## BV6

Item No. 28830

**CAS Registry No.:** 1001600-56-1  
**Formal Name:** 4,4'-(1,6-hexanediyl)bis[N-methyl-L-alanyl-(2S)-2-cyclohexylglycyl-L-prolyl-β-phenyl-L-phenylalaninamide]  
**MF:** C<sub>70</sub>H<sub>96</sub>N<sub>10</sub>O<sub>8</sub>  
**FW:** 1,205.6  
**Purity:** ≥98%  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

## Laboratory Procedures

BV6 is supplied as a crystalline solid. A stock solution may be made by dissolving the BV6 in the solvent of choice, which should be purged with an inert gas. BV6 is soluble in the organic solvent DMSO at a concentration of approximately 60 mg/ml.

## Description

BV6 is a bivalent Smac mimetic and an antagonist of the inhibitor of apoptosis (IAP) proteins that binds to IAP1 and XIAP ( $K_{d,s} = 0.46$  and  $1.3$  nM, respectively).<sup>1</sup> It induces autoubiquitination and proteasomal degradation of IAP1 and XIAP in MDA-MB-231 cells when used at a concentration of  $5 \mu\text{M}$ . BV6 ( $4 \mu\text{M}$ ) induces NF- $\kappa\text{B}$  activation and TNF-dependent apoptosis in A2058 and MDA-MB-231 cells. It enhances radiosensitization and increases apoptosis in HCC193 and H460 non-small cell lung cancer (NSCLC) cell lines.<sup>2</sup> BV6 ( $1 \mu\text{M}$ ) induces cell death in a panel of 40 primary, patient-derived B cell precursor acute lymphoblastic leukemia (BCP-ALL) samples in a TNF-dependent manner.<sup>3</sup> *In vivo*, BV6 ( $10 \text{ mg/kg}$ ) increases survival and the time to relapse in a high-risk BCP-ALL patient-derived xenograft (PDX) mouse model.

## References

- Varfolomeev, E., Blankenship, J.W., Wayson, S.M., *et al.* IAP antagonists induce autoubiquitination of c-IAPs, NF- $\kappa\text{B}$  activation, and TNF $\alpha$ -dependent apoptosis. *Cell* **131**(4), 669-681 (2007).
- Li, W., Li, B., Giacalone, N.J., *et al.* BV6, an IAP antagonist, activates apoptosis and enhances radiosensitization of non-small cell lung carcinoma in vitro. *J. Thorac. Oncol.* **6**(11), 1801-1809 (2011).
- Schirmer, M., Trentin, L., Queudeville, M., *et al.* Intrinsic and chemo-sensitizing activity of SMAC-mimetics on high-risk childhood acute lymphoblastic leukemia. *Cell Death Dis.* **7**:e2052 (2016).

### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

### WARRANTY AND LIMITATION OF REMEDY

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## CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA

**PHONE:** [800] 364-9897  
[734] 971-3335

**FAX:** [734] 971-3640

CUSTSERV@CAYMANCHEM.COM  
WWW.CAYMANCHEM.COM