



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!  
See the following pages for more information!



### Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

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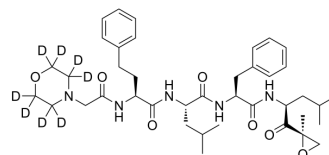
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## Carfilzomib-d<sub>8</sub>

Cat. No.:	HY-10455S
CAS No.:	1537187-53-3
Molecular Formula:	C <sub>40</sub> H <sub>49</sub> D <sub>8</sub> N <sub>5</sub> O <sub>7</sub>
Molecular Weight:	727.96
Target:	Proteasome; Apoptosis; Autophagy; Isotope-Labeled Compounds
Pathway:	Metabolic Enzyme/Protease; Apoptosis; Autophagy; Others
Storage:	-20°C, protect from light * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



### SOLVENT & SOLUBILITY

#### In Vitro

DMF : ≥ 15 mg/mL (20.61 mM)  
 DMSO : ≥ 15 mg/mL (20.61 mM)  
 DMSO : ≥ 15 mg/mL (20.61 mM)  
 DMF : ≥ 15 mg/mL (20.61 mM)  
 Ethanol : ≥ 1 mg/mL (1.37 mM)  
 Ethanol : ≥ 1 mg/mL (1.37 mM)  
 \* "≥" means soluble, but saturation unknown.

	Solvent		Mass		
	Concentration		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM		1.3737 mL	6.8685 mL	13.7370 mL
	5 mM		0.2747 mL	1.3737 mL	2.7474 mL
	10 mM		0.1374 mL	0.6869 mL	1.3737 mL

Please refer to the solubility information to select the appropriate solvent.

### BIOLOGICAL ACTIVITY

#### Description

Carfilzomib-d<sub>8</sub> is deuterium labeled Carfilzomib. Carfilzomib (PR-171) is an irreversible proteasome inhibitor with an IC<sub>50</sub> of 5 nM in ANBL-6 and RPMI 8226 cells.

#### In Vitro

Stable heavy isotopes of hydrogen, carbon, and other elements have been incorporated into drug molecules, largely as tracers for quantitation during the drug development process. Deuteration has gained attention because of its potential to affect the pharmacokinetic and metabolic profiles of drugs<sup>[1]</sup>.

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### REFERENCES

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- [1]. Dasmahapatra G, et al. Carfilzomib interacts synergistically with histone deacetylase inhibitors in mantle cell lymphoma cells in vitro and in vivo. *Mol Cancer Ther.* 2011 Sep;10(9):1686-97.
- [2]. Kuhn DJ, et al. Potent activity of carfilzomib, a novel, irreversible inhibitor of the ubiquitin-proteasome pathway, against preclinical models of multiple myeloma. *Blood.* 2007 Nov 1;110(9):3281-90.
- [3]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. *Ann Pharmacother.* 2019;53(2):211-216.
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**Caution: Product has not been fully validated for medical applications. For research use only.**

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