

Carfilzomib

Catalogue Number : 8681740

RUO: For Research Use Only. Not for use in diagnostic procedures.

Product Information

Synonyms: Kyprolis, PR-171

Chemical Name: (2S)-4-methyl-N-[(2S)-1-[[[(2S)-4-methyl-1-[(2R)-2-methyloxiran-2-yl]-1-oxopentan-2-yl]amino]-1-oxo-3-phenylpropan-2-yl]-2-[[[(2S)-2-[(2-morpholin-4-ylacetyl)amino]-4-phenylbutanoyl]amino]pentanamide

Molecular Formula: C₄₀H₅₇N₅O₇

Molecular Weight: 719.9

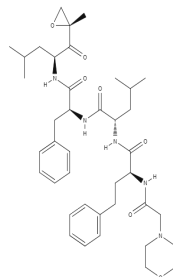
CAS Number: 868540-17-4

Purity: 98%

Applications: FA

Formulation: Crystalline solid

Storage: Product should be kept at -20°C.



Description

Carfilzomib is a selective irreversible proteasome inhibitor and analog of epoxomicin. It binds to and inhibits the chymotrypsin-like activity of the 20S proteasome. Carfilzomib is reported to inhibit tumor growth and induce cell cycle arrest and apoptosis.

Preparation & Storage

Soluble in organic solvents such as ethanol and DMSO. It is soluble in DMSO up to 15mg/ml.

References

1. Kortuem, K. M., & Stewart, A. K. (2013). Carfilzomib. *Blood, The Journal of the American Society of Hematology*, 121(6), 893-897. Yang, J., Wang, Z., Fang, Y., Jiang, J., Zhao, F., Wong, H., ... & Kirk, C. J. (2011). Pharmacokinetics, pharmacodynamics, metabolism, distribution, and excretion of carfilzomib in rats. *Drug Metabolism and Disposition*, 39(10), 1873-1882. Stewart, A. K., Rajkumar, S. V., Dimopoulos, M. A., Masszi, T., Špika, I., Oriol, A., ... & Goranova-Marinova, V. (2015). Carfilzomib, lenalidomide, and dexamethasone for relapsed multiple myeloma. *New England Journal of Medicine*, 372(2), 142-152.