# Tribioscience

## Carfilzomib, Proteasome inhibitor

Catalog	Unit
TBI1477-5MG	5 mg
TBI1477-25MG	25 mg

## **Product Details**

Formal Name:  $(\alpha S) - \alpha - [[2 - (4 - morpholinyl)acetyl]amino]benzenebutanoyl-L-leucyl-N-[(1S)-3 - methyl-1-[[(2R)-2 - methyl-2 - oxiranyl]carbonyl]butyl] - L-Phenylalaninamide$ Alternate Names: PR-171Molecular Formula: C<sub>40</sub>H<sub>57</sub>N<sub>5</sub>O<sub>7</sub>Formula Weight: 719.93CAS Number: 868540-17-4Purity: >98%Formulation: powderSolubility: Soluble in DMSO (up to 80 mg/ml) or in Ethanol (up to 25 mg/ml).Storage: -20°C $Stability: <math>\geq 1$  year.

#### **Applications**

Proteasome inhibitor

### **Functions**

A potent and irreversible proteasome inhibitor. Synthetic analog of the microbial product epoxomcin. Compared to bortezomib it displays equal potency but greater selectivity for the chymotrypsin-like activity of the proteasome. In cell culture it is more cytotoxic than bortezomib and hematologic tumor cells exhibit greater sensitivity than solid tumor cells. Treatment of cells with carfilzomib results in the accumulation of proteasome substrates and induction of cell cycle arrest and/or apoptosis. Effective against multiple myeloma. Active in vivo.

#### **Application Procedures**

First dissolved in DMSO (up to 80 mg/ml) or in Ethanol (up to 25 mg/ml), then diluted to aqueous buffer. Solutions in DMSO or ethanol may be stored at -20° for up to 1 week.

For research use only.