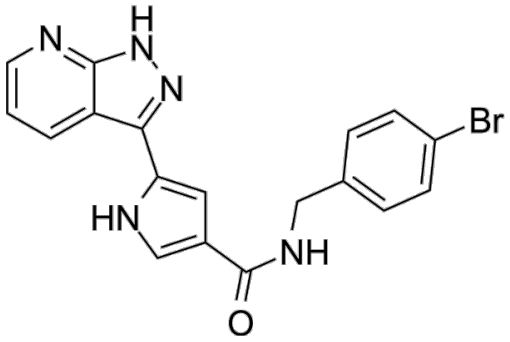
# Product Data Sheet

Product Name: XMU-MP-10
Cat. No.: GC79628

## Chemical Properties

| | | | |
|---|---|---|---|
| Cas. No. | 2251132-02-0 | | |
| Formula | $C_{18}H_{14}BrN_5O$ | M.Wt | 396.24 |
| Solubility | DMSO: 4.17 mg/mL (10.52 mM; ultrasonic and warming and heat to 60°C) | Storage | Store at -20°C |
| General tips | For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20°C for several months. | | |
| Shipping Condition | Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request. | | |
| Structure | | | |




## Background

XMU-MP-10 is a selective NEDD4 inhibitor with a K D of 43.92 nM. XMU-MP-10 selectively inhibits NEDD4 auto-ubiquitination without affecting other ubiquitination activity, upregulates of β-TrCP and results YAP degradation without affecting NEDD4 protein expression. XMU-MP-10 exhibits significant in vivo efficacy in inhibiting TNBC tumor growth by enhancing CD8 + T cell infiltration. XMU-MP-10 enhances antitumor immune responses through the β-TrCP / YAP / ECM axis. XMU-MP-10 can be used for Triple-Negative Breast Cancer (TNBC) research [1].

***Caution: Product has not been fully validated for medical applications. For research use only.***
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In Vivo, XMU-MP-10 (25 mg/kg, i.v., daily for 14 days) is well tolerated in 4T1 cells induced-BALB/c mice but not in 4T1 cells-induced BALB/c-nu mice[1]. XMU-MP-10 (25 mg/kg, i.v., daily for 14 days) has a crucial role for CD8+ T cells in tumor inhibition and influences the β-TrCP-YAP-ECM axis in EMT6 cells induced-BALB/c mice[1]. XMU-MP-10 (25 mg/kg, i.v., daily for 14 days) enhances antitumor immune response by increasing intratumoral infiltration of CD8 cytotoxic T cells in a humanized immune system mice mode[1].

In Vitro, XMU-MP-10 interacts with the HECT domain of NEDD4 at residues Y604, Y605, and Y634[1]. XMU-MP-10 (0.1-10000 μM) binds specifically to WT NEDD4, but not to NEDD4 mutants at Y604A, Y605A, or Y634A[1]. XMU-MP-10 (0.25-10 μM, 1-12 h) significantly inhibits the polyubiquitination of NEDD4 in a dose-dependent manner, upregulates of β-TrCP and results YAP degradation in a dose and time-dependent manner without affecting NEDD4 protein expression in EMT6, 4T1, MDA-MB-231 and HCC38 cells[1]. XMU-MP-10 (2-10 μM, 4 h) selectively inhibits NEDD4 auto-ubiquitination without affecting the ubiquitination activity of the other tested E3 ligases in HEK-293T cell[1].

References:
[1]. Su N, et al,. Inhibiting NEDD4 in triple-negative breast cancer cells reprograms tumor immune microenvironment via the β-TrCP/YAP/ECM axis. Cell Rep Med. 2025 Oct 21;6(10):102420.

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