

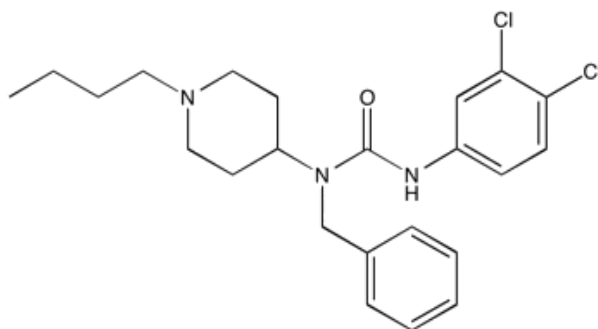


Catalog # 10-1636

NACM-OPT

1-Benzyl-1-(1-butylpiperidin-4-yl)-3-(3,4-dichlorophenyl)urea

Lot # S104075



A potent and selective NEDD8 ligation inhibitor, $IC_{50}=80$ nM (*in vitro*).¹ It inhibits the N-terminal acetyl-dependent interaction between the E2 conjugating enzyme UBE2M/UBC12 and DCN1, a subunit of a multiprotein E3 ligase for the ubiquitin-like protein NEDD8, an interaction which is essential for assembly of the multiprotein ligation complex.² NACM-OPT inhibits NEDD8 ligation *in vitro* and in cells ($IC_{50}=10$ μ M) and suppresses anchorage-independent growth of HCC95 cells and is highly selective with respect to other N-terminal acetyl protein binding sites.¹

- 1) Scott *et al.* (2017), *Blocking an N-terminal acetylation-dependent protein interaction inhibits an E3 ligase*; Nat. Chem. Biol., **13** 850
- 2) Scott *et al.* (2011), *N-terminal acetylation acts as an avidity enhancer within an interconnected multiprotein complex*; Science, **334** 674

PHYSICAL DATA

Molecular Weight:	434.40
Molecular Formula:	C ₂₃ H ₂₉ Cl ₂ N ₃ O
Purity:	98% by HPLC/TLC
	NMR: (Conforms)
Solubility:	DMSO (up to 30 mg/ml) or Ethanol (up to 20 mg/ml)
Physical Description:	White solid
Storage and Stability:	Store as supplied at -20°C for up to 1 year from the date of purchase. Solutions in DMSO or ethanol may be stored at -20°C for up to 3 months.

Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.

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