

Product Name : Dynole 34-2

Synonyms : —

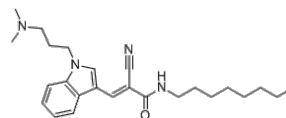
Cat No. : M10451

CAS Number : 1128165-88-7

Molecular Formula : C₂₅H₃₆N₄O

Formula Weight : 408.59

Chemical Name : 2-Cyano-3-[1-[3-(dimethylamino)propyl]-1H-indol-3-yl]-N-octyl-2-propenamide



Description : Dynole 34-2 is a potent dynamin GTPase inhibitor with IC₅₀ of 6.9 and 14.2 μM for full-length dynI and dynII GTPase activity, respectively; induces cytokinesis failure at the point of abscission, consistent with inhibition of dynamin while not affecting other cell cycle stages in cancer cells; disrupt midbody localization of calcineurin but not phospho-dynII and γ-tubulin, inhibits growth in a range of cancer cell lines with IC₅₀ of 4.0 to 36.7 μM in MTT assays; Dynole 34-2 is a novel antimitotic compound acting specifically at the abscission stage.

Pathway : Cytoskeleton/Cell Adhesion Molecules

Target : Dynamin

Receptor : Dynamin

Solubility : —

SMILES : CCCCCCCCNC(=O)C(=CC1=CN(C2=CC=CC=C21)CCCN(C)C)C#N

Storage : (-20°C)

Stability : ≥ 2 years

Reference :

1. Chircop M, et al. Mol Cancer Ther. 2011 Sep;10(9):1553-62. | 2. Hill TA, et al. J Med Chem. 2009 Jun 25;52(12):3762-73. | 3. Robertson MJ, et al. Nat Protoc. 2014 Apr;9(4):851-70. | 4. Jackson J, et al. Mol Psychiatry. 2015 Jul;20(7):810-9.