

Compound 401, Dual mTOR / DNA-PK inhibitor

Catalog	Unit
TBI3055-5MG	5 mg
TBI3055-25MG	25 mg

Product Details

Formal Name: 2-(4-Morpholinyl)-4H-pyrimido[2,1-a]isoquinolin-4-one

Molecular Formula: C₁₆H₁₅N₃O₂

Formula Weight: 381.3

CAS Number: 168425-64-7

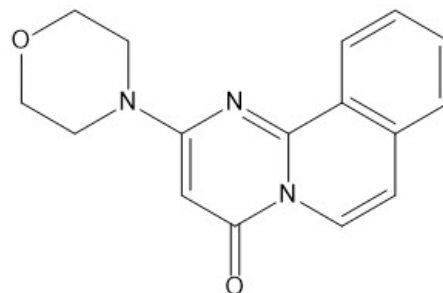
Purity: >98%

Formulation: Powder

Solubility: Soluble in DMSO (up to 6 mg/ml with warming)

Storage: -20°C

Stability: ≥ 2 years



Applications

Dual mTOR / DNA-PK inhibitor

Functions

Dual inhibitor of DNA-dependent protein kinase (DNA-PK) and mammalian target of rapamycin (mTOR), IC₅₀s = 0.28 and 5.3 μM, respectively) with selectivity over PI3K, ATM, and ATR. Treatment of cells with 401 (10 μM) blocked the phosphorylation of sites modified by mTOR-Raptor and mTOR-Rictor complexes (ribosomal protein S6 kinase 1 Thr(389) and Akt Ser(473), respectively) with no direct inhibition of Akt Thr(308) phosphorylation, which is dependent on PI3K.

Application Procedures

First dissolved in DMSO (up to 6 mg/ml with warming), then diluted to aqueous buffer. Solutions in DMSO may be stored at -20°C for up to 3 months.

For research use only.