

M22, NEDD8 activating enzyme inhibitor

Catalog	Unit
TBI5733-5MG	5 mg
TBI5733-25MG	25 mg

Product Details

Formal Name: 1-Benzyl-N-(2,4-dichlorophenethyl) piperidin-4-amine or N-[2-(2,4-dichlorophenyl)ethyl]-1-(phenylmethyl)-4-piperidinamine

Alternate Names: NAE-IN-M22;

Molecular Formula: C₂₀H₂₄Cl₂N₂

Formula Weight: 363.3

CAS Number: 864420-54-2

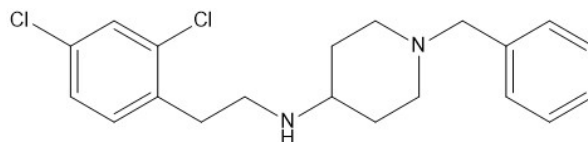
Purity: >98%

Formulation: Powder

Solubility: Soluble in DMSO (40 mg/ml)

Storage: -20°C

Stability: ≥ 2 years.



Applications

NEDD8 activating enzyme inhibitor

Functions

Protein neddylation is a post-translational modification which transfers the ubiquitin-like protein NEDD8 to a lysine residue of the target substrate through a three-step enzymatic cascade and has been considered as a viable target for the development of new therapeutics for cancer. M22 is an inhibitor of NEDD8 activating enzyme (NAE) which was discovered by virtual screening of a small molecule library (50,000 compounds) against the active site of NAE. M22 is selective and reversible and inhibits NEDDylation of ubiquitin-conjugating enzyme 12 (UBC12) in a cell-free assay employing recombinant human NAE. It selectively inhibits NEDDylation over SUMOylation and ubiquitination in A549 cells and inhibits their growth (GI₅₀ = 5.5 μM). It has been shown to inhibit tumor growth in a mouse xenograft model (at 60 mg/kg).

Application Procedures

First dissolved in DMSO (40 mg/ml), then diluted to aqueous buffer. Solutions in DMSO may be stored at -20°C for up to 3 months.

For research use only.