NEDD8-activating Enzyme

NAE

NEDD8-activating Enzyme (NAE) is an essential component of the NEDD8 conjugation pathway that controls the activity of the cullin-RING subtype of ubiquitin ligases, thereby regulating the turnover of a subset of proteins upstream of the proteasome. Substrates of cullin-RING ligases have important roles in cellular processes associated with cancer cell growth and survival pathways.

NEDD8 (neural precursor cell expressed developmentally downregulated protein 8) is the ubiquitin-like protein most homologous to ubiquitin. The covalent binding of NEDD8 to substrate proteins is called “neddylation”, and includes the following steps: mature NEDD8 is activated by NEDD8-activating enzyme E1 (NAE), transferred by NEDD8-conjugating enzyme E2, and conjugated to the substrate protein by a NEDD8-E3 ligase.

NAE is a critical regulator of the neddylation pathway. Inhibition of NAE can inhibit the activity of the cullin-RING ligases (CRLs) and result in accumulation of CRL substrate proteins.
NEDD8-activating Enzyme Inhibitors

**NAcM-OPT**

Cat. No.: HY-111505

NAcM-OPT is an orally bioavailable cullin neddylation 1 (DCN1) inhibitor, which potently inhibits the DCN1-UBE2M interaction.

Purity: 98.60%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

**Pevonedistat (MLN4924)**

Cat. No.: HY-70062

Pevonedistat (MLN4924) is a potent and selective NEDD8-activating enzyme (NAE) inhibitor with an IC$_{50}$ of 4.7 nM.

Purity: 98.84%
Clinical Data: Phase 3
Size: 10 mM × 1 mL, 1 mg, 5 mg, 10 mg, 50 mg, 100 mg, 200 mg

**Pevonedistat hydrochloride (MLN4924 hydrochloride)**

Cat. No.: HY-10484

Pevonedistat hydrochloride (MLN4924 hydrochloride) is a potent and selective NEDD8-activating enzyme (NAE) inhibitor, with an IC$_{50}$ of 4.7 nM.

Purity: >98.0%
Clinical Data: Phase 3
Size: 10 mM × 1 mL, 1 mg, 5 mg, 10 mg, 50 mg, 100 mg, 200 mg

**TAS4464**

Cat. No.: HY-128586

TAS4464 is a highly potent and selective inhibitor of NEDD8 activating enzyme (NAE), with an IC$_{50}$ of 0.955 nM.

Purity: 98.21%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 1 mg, 5 mg

**TAS4464 hydrochloride**

Cat. No.: HY-128586A

TAS4464 (hydrochloride) is a highly potent and selective inhibitor of NEDD8 activating enzyme (NAE), with an IC$_{50}$ of 0.955 nM.

Purity: >98%
Clinical Data: No Development Reported
Size: 100 mg, 250 mg, 500 mg

**ZM223**

Cat. No.: HY-101790

ZM223 is a potent non-covalent NEDD8 activating enzyme (NAE) inhibitor, orally active.

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 50 mg, 100 mg

**ZM223 hydrochloride**

Cat. No.: HY-101790A

ZM223 hydrochloride is an orally active, potent non-covalent NEDD8 activating enzyme (NAE) inhibitor with excellent anticancer activity.

Purity: 98.00%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

Tel: 609-228-6898  Fax: 609-228-5909  Email: sales@MedChemExpress.com