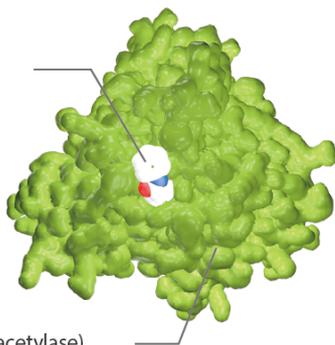


# NEDD8-activating Enzyme

NAE

HDAC Inhibitor:  
Vorinostat (SAHA)



HDAC (Histone deacetylase)

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 & Modulators

<p><b>NACM-OPT</b></p> <p style="text-align: right;">Cat. No.: HY-111505</p>	<p><b>Pevonedistat</b> (MLN4924)</p> <p style="text-align: right;">Cat. No.: HY-70062</p>
<p><b>Bioactivity:</b> NACM-OPT is an orally bioavailable cullin neddylation 1 ( <b>DCN1</b>) inhibitor, which potently inhibits the DCN1-UBE2M interaction <sup>[1]</sup>.</p> <p><b>Purity:</b> &gt;98%</p> <p><b>Clinical Data:</b> No Development Reported</p> <p><b>Size:</b></p> 	<p><b>Bioactivity:</b> Pevonedistat (MLN4924) is a potent and selective <b>NEDD8-activating enzyme ( NAE)</b> inhibitor with an <b>IC<sub>50</sub></b> of 4.7 nM.</p> <p><b>Purity:</b> 98.00%</p> <p><b>Clinical Data:</b> Phase 3</p> <p><b>Size:</b> 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg, 50 mg, 100 mg, 200 mg</p> 
<p><b>Pevonedistat hydrochloride</b> (MLN4924 (hydrochloride))</p> <p style="text-align: right;">Cat. No.: HY-10484</p>	<p><b>ZM223</b></p> <p style="text-align: right;">Cat. No.: HY-101790</p>
<p><b>Bioactivity:</b> Pevonedistat hydrochloride (MLN4924 hydrochloride) is a potent and selective NEDD8-activating enzyme ( <b>NAE</b>) inhibitor, with an <b>IC<sub>50</sub></b> of 4.7 nM.</p> <p><b>Purity:</b> 96.05%</p> <p><b>Clinical Data:</b> Phase 3</p> <p><b>Size:</b> 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg, 50 mg, 100 mg, 200 mg</p> 	<p><b>Bioactivity:</b> ZM223 is a novel non-sulfamide <b>NEDD8 activating enzyme</b> inhibitor that inhibits HCT116 colon cancer cells with an <b>IC<sub>50</sub></b> value of 100 nM.</p> <p><b>Purity:</b> &gt;98%</p> <p><b>Clinical Data:</b> No Development Reported</p> <p><b>Size:</b></p> 