mTOR (mammalian target of Rapamycin) is a protein that in humans is encoded by the mTOR gene. mTOR is a serine/threonine protein kinase that regulates cell growth, cell proliferation, cell motility, cell survival, protein synthesis, and transcription. mTOR belongs to the phosphatidylinositol 3-kinase-related kinase protein family. mTOR integrates the input from upstream pathways, including growth factors and amino acids. mTOR also senses cellular nutrient, oxygen, and energy levels. The mTOR pathway is dysregulated in human diseases, such as diabetes, obesity, depression, and certain cancers. Rapamycin inhibits mTOR by associating with its intracellular receptor FKBP12. The FKBP12-rapamycin complex binds directly to the FKBP12-Rapamycin Binding (FRB) domain of mTOR, inhibiting its activity.
### mTOR Inhibitors, Activators & Modulators

#### (+)-Usnic acid

<table>
<thead>
<tr>
<th>Cat. No.: HY-N0656A</th>
</tr>
</thead>
<tbody>
<tr>
<td>(+)-Usnic acid is isolated from isolated from lichens, binds at the ATP-binding pocket of mTOR, and inhibits mTORC1/2 activity. (+)-Usnic acid inhibits the phosphorylation of mTOR downstream effectors: Akt (Ser473), 4EBP1, S6K, induces autophagy, with anti-cancer activity.</td>
</tr>
<tr>
<td>Purity: &gt;99.0%</td>
</tr>
<tr>
<td>Clinical Data: No Development Reported</td>
</tr>
<tr>
<td>Size: 10 mM × 1 mL, 10 mg, 50 mg, 100 mg</td>
</tr>
</tbody>
</table>

#### 3BDO

<table>
<thead>
<tr>
<th>Cat. No.: HY-U00434</th>
</tr>
</thead>
<tbody>
<tr>
<td>3BDO is a new mTOR activator which can also inhibit autophagy.</td>
</tr>
<tr>
<td>Purity: 99.67%</td>
</tr>
<tr>
<td>Clinical Data: No Development Reported</td>
</tr>
<tr>
<td>Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg</td>
</tr>
</tbody>
</table>

#### Apitolisib

<table>
<thead>
<tr>
<th>Cat. No.: HY-13246</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apitolisib (GDC-0980; GNE 390; RG 7422) is a selective, potent, orally bioavailable Class I PI3 kinase and mTOR kinase (TORC1/2) inhibitor with IC₅₀ of 5 nM/27 nM/7 nM/14 nM for PI3Kα/PI3Kβ/PI3Kδ/PI3Kγ, and with a Ki of 17 nM for mTOR.</td>
</tr>
<tr>
<td>Purity: 98.26%</td>
</tr>
<tr>
<td>Clinical Data: Phase 2</td>
</tr>
<tr>
<td>Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg</td>
</tr>
</tbody>
</table>

#### Arnicolide D

<table>
<thead>
<tr>
<th>Cat. No.: HY-N6843</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arnicolide D is a sesquiterpene lactone isolated from Centipedes minima. Arnicolide D modulates the cell cycle, activates the caspase signaling pathway and inhibits the PI3K/AKT/mTOR and STAT3 signaling pathways.</td>
</tr>
<tr>
<td>Purity: &gt;99.0%</td>
</tr>
<tr>
<td>Clinical Data: No Development Reported</td>
</tr>
<tr>
<td>Size: 1 mg, 5 mg</td>
</tr>
</tbody>
</table>

#### AZD-8055

<table>
<thead>
<tr>
<th>Cat. No.: HY-10422</th>
</tr>
</thead>
<tbody>
<tr>
<td>AZD-8055 is a potent, selective, and orally bioavailable ATP-competitive mTOR kinase inhibitor with an IC₅₀ of 0.8 nM. AZD-8055 inhibits both mTORC1 and mTORC2.</td>
</tr>
<tr>
<td>Purity: 99.19%</td>
</tr>
<tr>
<td>Clinical Data: Phase 1</td>
</tr>
<tr>
<td>Size: 10 mM × 1 mL, 10 mg, 50 mg, 100 mg, 200 mg</td>
</tr>
</tbody>
</table>

#### BGT226

<table>
<thead>
<tr>
<th>Cat. No.: HY-13334A</th>
</tr>
</thead>
<tbody>
<tr>
<td>BGT226 (NVP-BGT226) is a PI3K (with IC₅₀ of 4 nM, 63 nM and 38 nM for PI3Kα, PI3Kβ and PI3Kγ/mTOR dual inhibitor which displays potent growth-inhibitory activity against human head and neck cancer cells.</td>
</tr>
<tr>
<td>Purity: &gt;98%</td>
</tr>
<tr>
<td>Clinical Data: No Development Reported</td>
</tr>
<tr>
<td>Size: 1 mg, 5 mg</td>
</tr>
</tbody>
</table>

#### BGT226 maleate

<table>
<thead>
<tr>
<th>Cat. No.: HY-13334</th>
</tr>
</thead>
<tbody>
<tr>
<td>BGT226 maleate (NVP-BGT226 maleate) is a PI3K (with IC₅₀ of 4 nM, 63 nM and 38 nM for PI3Kα, PI3Kβ and PI3Kγ/mTOR dual inhibitor which displays potent growth-inhibitory activity against human head and neck cancer cells.</td>
</tr>
<tr>
<td>Purity: 99.76%</td>
</tr>
<tr>
<td>Clinical Data: No Development Reported</td>
</tr>
<tr>
<td>Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg</td>
</tr>
</tbody>
</table>

#### CC-115

<table>
<thead>
<tr>
<th>Cat. No.: HY-16962</th>
</tr>
</thead>
<tbody>
<tr>
<td>CC-115 is a potent and dual DNA-PK and mTOR kinase inhibitor with IC₅₀ of 13 nM and 21 nM, respectively. CC-115 blocks both mTORC1 and mTORC2 signaling.</td>
</tr>
<tr>
<td>Purity: 96.64%</td>
</tr>
<tr>
<td>Clinical Data: Phase 2</td>
</tr>
<tr>
<td>Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg</td>
</tr>
</tbody>
</table>

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www.MedChemExpress.com
**CC-115 hydrochloride**  
Cat. No.: HY-16962A

CC-115 hydrochloride is a potent and dual DNA-PK and mTOR kinase inhibitor with IC\textsubscript{50} values of 13 nM and 22 nM, respectively. CC-115 blocks both mTORC1 and mTORC2 signaling.

- **Purity:** 97.22%
- **Clinical Data:** Phase 2
- **Size:** 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

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**Cyclovirobuxine D**  
Cat. No.: HY-N0107

Cyclovirobuxine D (CVB-D) is the main active component of the traditional Chinese medicine Buxus microphylla. Cyclovirobuxine D induces autophagy and attenuates the phosphorylation of Akt and mTOR.

- **Purity:** >95.0%
- **Clinical Data:** No Development Reported
- **Size:** 10 mM × 1 mL, 5 mg, 10 mg, 20 mg

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**Dactolisib**  
Cat. No.: HY-50673

Dactolisib (BEZ235) is a dual pan-class I PI3K and mTOR kinase inhibitor with IC\textsubscript{50} values of 4 nM/5 nM/7 nM/75 nM, and 20.7 nM for p110α/p110β/p110δ/p110γ and mTOR, respectively. Dactolisib (BEZ235) inhibits both mTORC1 and mTORC2.

- **Purity:** 99.13%
- **Clinical Data:** Phase 2
- **Size:** 50 mg, 100 mg, 200 mg, 500 mg

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**Dactolisib Tosylate**  
Cat. No.: HY-15174

Dactolisib Tosylate (BEZ235 Tosylate) is a dual PI3K and mTOR kinase inhibitor with IC\textsubscript{50} values of 4, 75, 7, 5 nM for PI3Kα, β, γ, δ, respectively. Dactolisib Tosylate (BEZ235 Tosylate) inhibits mTORC1 and mTORC2.

- **Purity:** 99.89%
- **Clinical Data:** Phase 2
- **Size:** 10 mM × 1 mL, 50 mg, 100 mg, 200 mg, 500 mg

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**Deforolimus**  
(Ridaforolimus; MK-8669; AP23573)  
Cat. No.: HY-50908

Deforolimus (AP23573; MK-8669) is a potent and selective mTOR inhibitor; inhibits ribosomal protein S6 phosphorylation with an IC\textsubscript{50} of 0.2 nM in HT-1080 cells.

- **Purity:** 98.46%
- **Clinical Data:** Phase 3
- **Size:** 10 mg, 50 mg

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**Dihydromyricetin**  
(Ampelopsis; Ampeloptin)  
Cat. No.: HY-N0112

Dihydromyricetin is a potent inhibitor with an IC\textsubscript{50} of 48 μM on dihydopyrimidinase. Dihydromyricetin can activate autophagy through inhibiting mTOR signaling. Dihydromyricetin suppresses the formation of mTOR complexes (mTORC1/2).

- **Purity:** 99.79%
- **Clinical Data:** No Development Reported
- **Size:** 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

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**ETP-46464**  
Cat. No.: HY-15521

ETP-46464 is an effective mTOR and ATR inhibitor with IC\textsubscript{50} of 0.6 and 14 nM, respectively.

- **Purity:** 98.01%
- **Clinical Data:** No Development Reported
- **Size:** 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

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**CC-223**  
Cat. No.: HY-16956

CC-223 is a potent, selective, and orally bioavailable inhibitor of mTOR kinase, with an IC\textsubscript{50} value for mTOR kinase of 16 nM. CC-223 inhibits both mTORC1 and mTORC2.

- **Purity:** 99.43%
- **Clinical Data:** Phase 2
- **Size:** 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

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**CZ415**  
Cat. No.: HY-100222

CZ415 is a potent and highly selective mTOR inhibitor with a pIC\textsubscript{50} of 8.07. CZ415 inhibits mTORC1 and mTORC2 protein complex.

- **Purity:** 98.43%
- **Clinical Data:** No Development Reported
- **Size:** 10 mM × 1 mL, 1 mg, 5 mg, 10 mg, 50 mg, 100 mg

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**Everolimus**  
(RAD001; SDZ-RAD)  
Cat. No.: HY-10218

Everolimus (RAD001) is a Rapamycin derivative and a potent, selective and orally active mTOR inhibitor. Everolimus binds to FKBP-12 to generate an immunosuppressive complex. Everolimus inhibits tumor cells proliferation and induces cell apoptosis and autophagy.

- **Purity:** 98.79%
- **Clinical Data:** Launched
- **Size:** 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

---

Dihydromyricetin can activate autophagy through inhibiting mTOR signaling. Dihydromyricetin suppresses the formation of mTOR complexes (mTORC1/2).
FT-1518
Cat. No.: HY-107363
FT-1518 is a new generation selective, potent and oral bioavailable mTORC1 and mTORC2 inhibitor, and exhibits antitumor activity.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

GDC-0084 (RG7666)
Cat. No.: HY-19962
GDC-0084 is a brain penetrant inhibitor of PI3K and mTOR, with IC_{50} of 2 nM, 46 nM, 3 nM, 10 nM and 70 nM for PI3Kα, PI3Kβ, PI3Kδ, PI3Kγ and mTOR, respectively.

Purity: 99.28%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

GDC-0349
Cat. No.: HY-15248
GDC-0349 is a potent and selective ATP-competitive mTOR inhibitor with a K_i of 3.8 nM. GDC-0349 inhibits both mTORC1 and mTORC2 complexes.

Purity: 98.20%
Clinical Data: Phase 1
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg

Gedeatosib (PKI-587; PF-05212384)
Cat. No.: HY-10681
Gedeatosib (PKI-587) is a highly potent dual inhibitor of PI3Kα, PI3Kγ, and mTOR with IC_{50} of 0.4 nM, 5.4 nM and 1.6 nM, respectively. PKI-587 is equally effective in both complexes of mTOR, mTORC1 and mTORC2.

Purity: 99.68%
Clinical Data: Phase 2
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

GNE-317
Cat. No.: HY-12763
GNE-317 is a PI3K/mTOR inhibitor, is able to cross the blood-brain barrier (BBB).

Purity: 99.26%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

GNE-477
Cat. No.: HY-11042
GNE-477 is a potent and efficacious dual PI3K (IC_{50}=4 nM/mTOR (IC_{50}=21 nM) inhibitor.

Purity: 95.81%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 1 mg, 5 mg, 10 mg, 25 mg, 50 mg

GNE-493
Cat. No.: HY-10811
GNE-493 is a potent, selective, and orally available dual pan-PI3-kinase/mTOR inhibitor with IC_{50} of 3.4 nM, 12 nM, 16 nM, 16 nM and 32 nM for PI3Kα, PI3Kβ, PI3Kδ, PI3Kγ and mTOR.

Purity: 95.12%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg

HDACs/mTOR Inhibitor 1
Cat. No.: HY-114414
HDACs/mTOR Inhibitor 1 is a dual Histone Deacetylases (HDACs) and mammalian target of Rapamycin (mTOR) target inhibitor for treating hematologic malignancies, with IC_{50} of 0.19 nM, 1.8 nM, 1.2 nM and >500 nM for HDAC1, HDAC6, mTOR and PI3Kα, respectively.

Purity: 99.12%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

GSK1059615
Cat. No.: HY-12036
GSK1059615 is a dual inhibitor of PI3Kα/β/δ/γ (reversible) and mTOR with IC_{50} of 0.4 nM/0.6 nM/2 nM/5 nM and 12 nM, respectively.

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

Hederacolchiside A1
Cat. No.: HY-N6950
Hederacolchiside A1, isolated from Pulsatilla chinensis, suppresses proliferation of tumor cells by inducing apoptosis through modulating PI3K/Akt/mTOR signaling pathway.

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg
JR-AB2-011
Cat. No.: HY-122022

JR-AB2-011 is a selective mTORC2 inhibitor with an IC\textsubscript{50} value of 0.36 \mu M. JR-AB2-011 inhibits mTORC2 activity by blocking Rictor-mTOR association (K\textsubscript{i}, 0.19 \mu M). JR-AB2-011 has anti-glioblastoma multiforme (GBM) properties.

Purity: 98.09%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

KU-0060648
Cat. No.: HY-13431

KU-0060648 is a dual inhibitor of PI3K and DNA-PK with IC\textsubscript{50}s of 4 nM, 0.5 nM, 0.1 nM, 0.594 nM and 8.6 nM for PI3K\textalpha, PI3K\textbeta, PI3K\textgamma, PI3K\textdelta and DNA-PK, respectively.

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg

L-Leucine
Cat. No.: HY-N0486

L-Leucine is an essential branched-chain amino acid (BCAA), which activates the mTOR signaling pathway.

Purity: >98.0%
Clinical Data: Launched
Size: 10 mM × 1 mL, 100 mg

LY3023414
Cat. No.: HY-12513

LY3023414 potently and selectively inhibits class I PI3K isoforms, DNA-PK, and mTORC1/2 with IC\textsubscript{50}s of 6.07 nM, 77.6 nM, 38 nM, 23.8 nM, 4.24 nM and 165 nM for PI3K\textalpha, PI3K\textbeta, PI3K\textgamma, PI3K\textdelta, PI3K\textepsilon and DNA-PK, respectively. LY3023414 potently inhibits mTORC1/2 at low nanomolar concentrations.

Purity: 99.77%
Clinical Data: Phase 2
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

MHY1485
Cat. No.: HY-B0795

MHY1485 is a potent cell-permeable mTOR activator that targets the ATP domain of mTOR. MHY1485 inhibits autophagy by suppression of fusion between autophagosomes and lysosomes.

Purity: 99.86%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg, 200 mg

MT 63-78
Cat. No.: HY-WD58849

MT 63-78 is a specific and potent direct AMPK activator with an IC\textsubscript{50} of 25 \mu M. MT 63-78 also induces cell mitotic arrest and apoptosis. MT 63-78 blocks prostate cancer growth by inhibiting the lipogenesis and mTORC1 pathways. MT 63-78 has antitumor effects.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

mTOR inhibitor-1
Cat. No.: HY-112914

mTOR inhibitor-1 is a novel mTOR pathway inhibitor which can suppress cells proliferation and inducing autophagy.

Purity: 99.29%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

mTOR inhibitor-2
Cat. No.: HY-111370

mTOR inhibitor-2 is a high potent, selective and oral mTOR inhibitor with an IC\textsubscript{50} of 7 nM. mTOR inhibitor-2 inhibits cellular phosphorylation of mTORC1 (pS6 and 4E-BP1) and mTORC2 (pAKT (S473)) substrates.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

mTOR inhibitor-3
Cat. No.: HY-18353

mTOR inhibitor-3 is a remarkably selective mTOR inhibitor with a K\textsubscript{i} of 1.5 nM. mTOR inhibitor-3 suppresses mTORC1 and mTORC2 in cellular and in vivo pharmacokinetic (PK)/pharmacodynamic (PD) experiments.

Purity: 98.54%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg
NSC781406
Cat. No.: HY-100470
NSC781406 is a highly potent PI3K and mTOR inhibitor with an IC50 of 2 nM for PI3Kα.
Purity: 99.91%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

Omipalisib
(GSK2126458; GS4417)
Cat. No.: HY-10297
Omipalisib (GSK2126458) is an orally active and highly selective inhibitor of PI3K with Ki of 0.019 nM/0.13 nM/0.024 nM/0.06 nM and 0.18 nM/0.3 nM for p110α/β/δ/γ, mTORC1/2, respectively. Omipalisib has anti-cancer activity.
Purity: 99.31%
Clinical Data: Phase 1
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg

Palomid 529
(P529)
Cat. No.: HY-14581
Palomid 529 is a potent inhibitor of mTORC1 and mTORC2 complexes.
Purity: 99.47%
Clinical Data: Phase 1
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg

PF-04691502
Cat. No.: HY-15177
PF-04691502 is a potent and selective inhibitor of PI3K and mTOR. PF-04691502 binds to human PI3Kα, β, δ, γ and mTORC1 with IC50s of 1.8, 2.1, 1.6, 1.9 and 16 nM, respectively.
Purity: 99.64%
Clinical Data: Phase 2
Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

PI-103 Hydrochloride
Cat. No.: HY-10115A
PI-103 Hydrochloride is a dual PI3K and mTOR inhibitor with IC50s of 8 nM, 88 nM, 48 nM, 150 nM, 20 nM, and 83 nM for p110α, p110β, p110δ, p110γ, mTORC1, and mTORC2. PI-103 Hydrochloride also inhibits DNA-PK with an IC50 of 2 nM. PI-103 Hydrochloride induces autophagy.
Purity: 98.06%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

PI3K/mTOR Inhibitor-1
Cat. No.: HY-112602
PI3K/mTOR Inhibitor-1 is a potent, orally bioavailable dual PI3K/mTOR inhibitor with IC50s of 20/376/204/46 nM and 186 nM for PI3Kα/PI3Kβ/PI3Kγ/PI3Kδ and mTOR, respectively. Antitumor activity.
Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg
PI3K/mTOR Inhibitor-2
Cat. No.: HY-111508
PI3K/mTOR Inhibitor-2 is a potent dual pan-PI3K/mTOR inhibitor with IC₅₀s of 3.4/34/16/1 nM for PI3Kα/PI3Kβ/PI3Kδ/PI3Kγ and 4.7 nM for mTOR. Antitumor activity.

Purity: 99.45%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

PI3Ka/mTOR-1
Cat. No.: HY-U00326
PI3Ka/mTOR-IN-1 is a potent PI3Kα/mTOR dual inhibitor, with an IC₅₀ of 7 nM for PI3Kα in a cell assay, and Ki of 10.6 nM and 12.5 nM for mTOR and PI3Ka in a cell free assay , respectively.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

PI3Kα/mTOR-IN-1
Cat. No.: HY-10683
PI3Kα/mTOR-IN-1 is a potent PI3Kα/mTOR dual inhibitor, combining Rapamycin with MLN0128 (a second-generation mTOR kinase inhibitor) by an inert chemical linker.

Purity: 99.79%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 50 mg, 100 mg

Polyphillin I
Cat. No.: HY-N0047
Polyphillin I is a bioactive constituent extracted from Paris polyphylla, has strong anti-tumor activity. Polyphillin I is an activator of the JNK signaling pathway and is an inhibitor of PDG1/Akt/mTOR signaling. Polyphillin I induces autophagy, G2/M phase arrest and apoptosis.

Purity: >98.0%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 20 mg

PP121
Cat. No.: HY-10372
PP121 is a multi-targeted kinase inhibitor with IC₅₀s of 10, 60, 12, 14, 2 nM for mTOR, DNK-PK, VEGFR2, Src, PDGFR, respectively.

Purity: 99.08%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 1 mg, 5 mg, 10 mg, 50 mg, 100 mg

PQR-530
Cat. No.: HY-107365
PQR-530 is a potent, oral and brain-penetrant dual pan-PI3K/mTORC1/2 inhibitor, exhibiting antitumor activity.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

PQR620
Cat. No.: HY-100026
PQR620 is an orally bioavailable and selective brain penetrant inhibitor of mTORC1/2.

Purity: 98.06%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 1 mg, 5 mg, 10 mg, 50 mg, 100 mg

Pomiferin (NSC 5113)
Cat. No.: HY-N4315
Pomiferin (NSC 5113), a flavonoid from the fruits of Maclura pomifera, acts as an potential inhibitor of HDAC, with an IC₅₀ of 1.05 μM, and also potently inhibits mTOR (IC₅₀ 6.2 μM).

Purity: 97.36%
Clinical Data: No Development Reported
Size: 1 mg

PP121
Cat. No.: HY-111373
Rapamycin, the third-generation bivalent mTOR inhibitor, combines Rapamycin with MLN0128 (a second-generation mTOR kinase inhibitor) by an inert chemical linker.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg, 25 mg

PP121
Cat. No.: HY-111373
Rapamycin (Sirolimus; AY-22989) is a potent and specific mTOR inhibitor with an IC₅₀ of 0.1 nM in HEK293 cells. Rapamycin binds to FKBP12 and specifically acts as an allosteric inhibitor of mTORC1. Rapamycin is an autophagy activator, an immunosuppressant.

Purity: 99.94%
Clinical Data: Launched
Size: 10 mM × 1 mL, 10 mg, 25 mg, 50 mg, 100 mg, 200 mg

Polyphillin I
Cat. No.: HY-N0047
Polyphillin I is a bioactive constituent extracted from Paris polyphylla, has strong anti-tumor activity. Polyphillin I is an activator of the JNK signaling pathway and is an inhibitor of PDG1/Akt/mTOR signaling. Polyphillin I induces autophagy, G2/M phase arrest and apoptosis.

Purity: >98.0%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 20 mg

PQR620
Cat. No.: HY-100026
PQR620 is an orally bioavailable and selective brain penetrant inhibitor of mTORC1/2.

Purity: 98.06%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 1 mg, 5 mg, 10 mg, 50 mg, 100 mg

PP121
Cat. No.: HY-11373
Rapamycin, the third-generation bivalent mTOR inhibitor, combines Rapamycin with MLN0128 (a second-generation mTOR kinase inhibitor) by an inert chemical linker.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg, 25 mg

PQR620
Cat. No.: HY-11373
Rapamycin (Sirolimus; AY-22989) is a potent and specific mTOR inhibitor with an IC₅₀ of 0.1 nM in HEK293 cells. Rapamycin binds to FKBP12 and specifically acts as an allosteric inhibitor of mTORC1. Rapamycin is an autophagy activator, an immunosuppressant.

Purity: 99.94%
Clinical Data: Launched
Size: 10 mM × 1 mL, 10 mg, 25 mg, 50 mg, 100 mg, 200 mg

Tel: 609-228-6898      Fax: 609-228-5909      Email: sales@MedChemExpress.com
Rapamycin-d3
(Sirolimus-d3; AY-22989-d3)  
Cat. No.: HY-102195

Rapamycin-d3 (Sirolimus-d3) is the deuterium labeled Rapamycin. Rapamycin is a potent and specific mTOR inhibitor with an IC<sub>50</sub> of 0.1 nM in HEK293 cells. Rapamycin binds to FKBP12 and specifically acts as an allosteric inhibitor of mTORC1.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Rotundic acid  
Cat. No.: HY-N2217

Rotundic acid, a triterpenoid obtained from 1 rotunda, induces DNA damage and cell apoptosis in hepatocellular carcinoma through AKT/mTOR and MAPK Pathways. Rotundic acid possesses anti-inflammatory and cardio-protective abilities.

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

Sapanisertib  
(INK-128; MLN0128; TAK-228)  
Cat. No.: HY-13328

Sapanisertib (INK-128; MLN0128; TAK-228) is an orally available, ATP-dependent mTOR1/2 inhibitor with an IC<sub>50</sub> of 1 nM for mTOR kinase.

Purity: 99.06%
Clinical Data: Phase 2
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

Torin 1  
Cat. No.: HY-13003

Torin 1 is a potent inhibitor of mTOR with an IC<sub>50</sub> of 3 nM. Torin 1 inhibits both mTORC1/2 complexes with IC<sub>50</sub> values between 2 and 10 nM. Torin 1 is an effective inducer of autophagy.

Purity: >99.0%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 50 mg, 100 mg

Torkinib  
(pp 242)  
Cat. No.: HY-10474

Torkinib (PP 242) is a selective and ATP-competitive mTOR inhibitor with an IC<sub>50</sub> of 8 nM. PP242 inhibits both mTORC1 and mTORC2 with IC<sub>50</sub> s of 30 nM and 58 nM, respectively.

Purity: 98.76%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

Rheb inhibitor NR1  
Cat. No.: HY-124798

Rheb inhibitor NR1 is a Rheb inhibitor with an IC<sub>50</sub> of 2.1μM in the Rheb-IVK assay. Rheb inhibitor NR1 also is a selective mTORC1 inhibitor. NR1 inhibits the phosphorylation of pS6K1 and increases the phosphorylation of p47/pAKT in a dose-dependent manner.

Purity: >98.0%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 100 mg

Salidroside  
(Rhodioloside)  
Cat. No.: HY-N0109

Salidroside is a prolyl endopeptidase Inhibitor. Salidroside alleviates cachexia symptoms in mouse models of cancer cachexia via activating mTOR signalling. Salidroside protects dopaminergic neurons by enhancing PINK1/Parkin-mediated mitophagy.

Purity: 98.63%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg

Temsriolimus  
(CCI-779)  
Cat. No.: HY-50910

Temsirolimus is an inhibitor of mTOR with an IC<sub>50</sub> of 1.76 μM.

Purity: 99.56%
Clinical Data: Launched
Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 100 mg

Torin 2  
Cat. No.: HY-13002

Torin 2 is an mTOR inhibitor with IC<sub>50</sub> of 0.25 nM for inhibiting cellular mTOR activity, and exhibits 800-fold selectivity over PI3K (EC<sub>50</sub> 200 nM). Torin 2 also inhibits DNA-PK with an IC<sub>50</sub> of 0.5 nM in the cell free assay. Torin 2 can suppress both mTORC1 and mTORC2.

Purity: 99.93%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg, 200 mg

Vistusertib  
(AZD2014)  
Cat. No.: HY-15247

Vistusertib (AZD2014) is an ATP competitive mTOR inhibitor with an IC<sub>50</sub> of 2.81 nM. AZD2014 inhibits both mTORC1 and mTORC2 complexes.

Purity: 98.82%
Clinical Data: Phase 2
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg, 200 mg
Voxtalisib
(XL765; SAR245409)
Cat. No.: HY-15900

Voxtalisib (XL765) is a potent PI3K inhibitor, which has a similar activity toward class I PI3K (IC_{50}=39, 113 and 43 nM for p110α, p110β, p110γ and p110δ, respectively) and also inhibits DNA-PK (IC_{50}=150 nM) and mTOR (IC_{50}=157 nM).

Purity: 99.46%
Clinical Data: Phase 1
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

WAY-600
Cat. No.: HY-15272

WAY-600 is a potent, ATP-competitive, and selective mTOR inhibitor with an IC_{50} of 9 nM for recombinant mTOR enzyme. WAY-600 blocks mTOR complex 1/2 (mTORC1/2) assemble and activation.

Purity: 95.12%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 2 mg, 5 mg, 10 mg, 50 mg, 100 mg

VS-5584
(SB2343)
Cat. No.: HY-16585

VS-5584 is a pan-PI3K/mTOR kinase inhibitor with IC_{50} of 16 nM, 68 nM, 42 nM, 25 nM, and 37 nM for PI3Kα, PI3Kβ, PI3Kδ, PI3Kγ, and mTOR, respectively. VS-5584 simultaneously blocks mTORC2 as well as mTORC1.

Purity: 98.01%
Clinical Data: Phase 1
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

WYE-132
(WYE-125132)
Cat. No.: HY-10044

WYE-132 (WYE-125132) is a highly potent, ATP-competitive, and specific mTOR kinase inhibitor (IC_{50}=0.19±0.07 nM; >5000-fold selective versus PI3Ks). WYE-132 inhibits mTORC1 and mTORC2.

Purity: 98.98%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 2 mg, 5 mg, 10 mg, 50 mg, 100 mg

VS-5584

WYE-687
(WYE-15271)

WYE-687 is an ATP-competitive mTOR inhibitor with IC_{50} of 7 nM. WYE-687 concurrently inhibits activation of mTORC1 and mTORC2. WYE-687 also inhibits PI3Kα and PI3Kδ with IC_{50}s of 81 nM and 3.11 μM, respectively.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

WYE-687 dihydrochloride
Cat. No.: HY-15271A

WYE-687 dihydrochloride is an ATP-competitive mTOR inhibitor with IC_{50} of 7 nM. WYE-687 dihydrochloride concurrently inhibits activation of mTORC1 and mTORC2. WYE-687 also inhibits PI3Kα and PI3Kδ with IC_{50}s of 81 nM and 3.11 μM, respectively.

Purity: >98.0%
Clinical Data: No Development Reported
Size: 2 mg, 5 mg

XL388
Cat. No.: HY-13806

XL388 is a highly potent and ATP-competitive mTOR inhibitor with IC_{50} of 9.9 nM. XL388 simultaneously inhibits both mTORC1 and mTORC2.

Purity: 98.46%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg