

# PI4K

## Phosphatidylinositol 4 kinases;PI4 kinases

HDAC Inhibitor:  
Vorinostat (SAHA)



HDAC (Histone deacetylase)

The phosphatidylinositol 4-kinases (PI4Ks) synthesize phosphatidylinositol 4-phosphate (PI4P), a key member of the phosphoinositide family. PI4P defines the membranes of Golgi and trans-Golgi network (TGN) and regulates trafficking to and from the Golgi.

In mammals there are four different PI4K enzymes, two type II enzymes (PI4KII $\alpha$  and PI4KII $\beta$ ) and two type III enzymes (PI4KIII $\alpha$  and PI4KIII $\beta$ ). PI4KIII $\beta$  plays key roles in mediating lipid transport, cytokinesis, maintaining lysosomal identity, and in tandem with Rab GTPases plays key roles in regulating membrane trafficking. PI4KIII $\beta$  is critical for mediating viral replication of a number of RNA viruses

through the generation of PI4P enriched viral replication platforms. Small molecule inhibitors of PI4KIII $\beta$  are potent anti-viral agents. Development of PI4KIII $\beta$  as an effective drug target for anti-viral therapeutics requires the generation of highly potent and specific inhibitors.

## PI4K Inhibitors & Modulators

<p><b>BF738735</b></p> <p style="text-align: right;">Cat. No.: HY-U00426</p> <p><b>Bioactivity:</b> BF738735 is a phosphatidylinositol 4-kinase III beta ( <b>PI4KIIIβ</b>) inhibitor with an <b>IC<sub>50</sub></b> of 5.7 nM.</p> <p><b>Purity:</b> 99.10%</p> <p><b>Clinical Data:</b> No Development Reported</p> <p><b>Size:</b> 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg</p> 	<p><b>BQR-695</b> (NVP-BQR695)</p> <p style="text-align: right;">Cat. No.: HY-18748</p> <p><b>Bioactivity:</b> BQR-695 is a <b>PI4KIIIβ</b> inhibitor with <b>IC<sub>50</sub>s</b> of 80 and 3.5 nM for human PI4KIIIβ and Plasmodium variant of PI4KIIIβ, respectively.</p> <p><b>Purity:</b> 99.78%</p> <p><b>Clinical Data:</b> No Development Reported</p> <p><b>Size:</b> 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg, 200 mg</p> 
<p><b>KDU691</b></p> <p style="text-align: right;">Cat. No.: HY-12912</p> <p><b>Bioactivity:</b> KDU691 is a <b>PI4K</b> inhibitor.</p> <p><b>Purity:</b> 99.46%</p> <p><b>Clinical Data:</b> No Development Reported</p> <p><b>Size:</b> 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg</p> 	<p><b>PI4KIII beta inhibitor 3</b></p> <p style="text-align: right;">Cat. No.: HY-15679</p> <p><b>Bioactivity:</b> PI4KIII beta inhibitor 3 is a novel and high effective <b>PI4KIIIβ</b> inhibitor with <b>IC<sub>50</sub></b> of 5.7 nM.</p> <p><b>Purity:</b> 97.96%</p> <p><b>Clinical Data:</b> No Development Reported</p> <p><b>Size:</b> 10mM x 1mL in DMSO, 2 mg, 5 mg, 10 mg</p> 
<p><b>PI4KIIIbeta-IN-10</b></p> <p style="text-align: right;">Cat. No.: HY-100198</p> <p><b>Bioactivity:</b> PI4KIIIbeta-IN-10 is a potent <b>PI4KIIIβ</b> inhibitor with an <b>IC<sub>50</sub></b> of 3.6 nM.</p> <p><b>Purity:</b> 98.90%</p> <p><b>Clinical Data:</b> No Development Reported</p> <p><b>Size:</b> 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg, 25 mg, 50 mg</p> 	<p><b>PI4KIIIbeta-IN-9</b></p> <p style="text-align: right;">Cat. No.: HY-19798</p> <p><b>Bioactivity:</b> PI4KIIIbeta-IN-9 is a potent <b>PI4KIIIβ</b> inhibitor with an <b>IC<sub>50</sub></b> of 7 nM. PI4KIIIbeta-IN-9 also inhibits <b>PI3Kδ</b> and <b>PI3Kγ</b> with <b>IC<sub>50</sub>s</b> of 152 nM and 1046 nM, respectively.</p> <p><b>Purity:</b> 98.16%</p> <p><b>Clinical Data:</b> No Development Reported</p> <p><b>Size:</b> 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg, 25 mg, 50 mg</p> 
<p><b>PIK-93</b></p> <p style="text-align: right;">Cat. No.: HY-12046</p> <p><b>Bioactivity:</b> PIK-93 is the first potent, synthetic <b>PI4K (PI4KIIIβ)</b> inhibitor with <b>IC<sub>50</sub></b> of 19 nM, and also inhibits <b>PI3Kγ</b> and <b>PI3Kα</b> with <b>IC<sub>50</sub></b> of 16 nM and 39 nM, respectively.</p> <p><b>Purity:</b> 99.13%</p> <p><b>Clinical Data:</b> No Development Reported</p> <p><b>Size:</b> 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg</p> 	<p><b>T-00127_HEV1</b></p> <p style="text-align: right;">Cat. No.: HY-108313</p> <p><b>Bioactivity:</b> T-00127_HEV1 is a <b>phosphatidylinositol 4-kinase III beta (PI4KB)</b> inhibitor with an <b>IC<sub>50</sub></b> of 60 nM.</p> <p><b>Purity:</b> 99.97%</p> <p><b>Clinical Data:</b> No Development Reported</p> <p><b>Size:</b> 5 mg</p> 
<p><b>UCB9608</b></p> <p style="text-align: right;">Cat. No.: HY-112613</p> <p><b>Bioactivity:</b> UCB9608 is a potent, selective and orally active <b>PI4KIIIβ</b> inhibitor, with an <b>IC<sub>50</sub></b> of 11 nM, selective over PI3K2 α, β, and γ lipid kinases. UCB9608 improves metabolic stability and exhibits excellent pharmacokinetic profile, acts as a pot...</p> <p><b>Purity:</b> 99.12%</p> <p><b>Clinical Data:</b> No Development Reported</p> <p><b>Size:</b> 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg</p> 	<p><b>UCT943</b></p> <p style="text-align: right;">Cat. No.: HY-112435</p> <p><b>Bioactivity:</b> UCT943 is a next-generation Plasmodium falciparum <b>PI4K</b> inhibitor. UCT943 inhibits the P. vivax PI4K ( PvPI4K) enzyme with an <b>IC<sub>50</sub></b> of 23 nM [1].</p> <p><b>Purity:</b> &gt;98%</p> <p><b>Clinical Data:</b> No Development Reported</p> <p><b>Size:</b> 250 mg, 500 mg</p> 