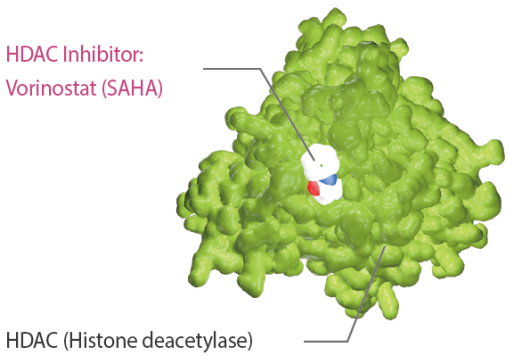
ULK

Unc-51 like kinase



ULK1, a serine/threonine protein kinase, is an enzyme that in humans is encoded by the ULK1 gene. ULK1 is essential for the initial stages of autophagy. ULK1 is an important protein in autophagy. It is part of the ULK1-complex, which is needed in early steps of autophagosome biogenesis. ULK1 inhibition results in accumulation of stalled early autophagosomal structures, indicating a role for ULK1 in the maturation of autophagosomes as well as initiation.

ULK2 is essential for astrocyte transformation and tumor growth. ULK2 also inhibits the growth of glioma cells, which requires autophagy induction as kinase mutant of ULK2 fails to induce autophagy and inhibit growth. ULK2 and its homologue ULK1 are only down-regulated in all grades of glioma. Thus these results altogether suggest that inhibition of autophagy by ULK1/2 down-regulation is essential for glioma development.

ULK Inhibitors & Modulators

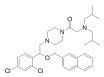
LYN-1604

(LYN1604; LYN 1604)

Cat. No.: HY-101923

Bioactivity: LYN-1604 is a potent UNC-51-like kinase 1 (**ULK1**) agonist with an **EC_{50}** of 18.94 nM.

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

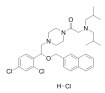


LYN-1604 hydrochloride

Cat. No.: HY-101923A

Bioactivity: LYN-1604 hydrochloride is a potent **ULK1** activator with an **EC_{50}** of 18.94 nM.

Purity: 99.80%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 25 mg, 50 mg, 100 mg



MRT67307

Cat. No.: HY-13018

Bioactivity: MRT67307 is a dual inhibitor of the **IKKε** and **TBK-1** with **IC_{50}**s of 160 and 19 nM, respectively. MRT67307 also inhibits ULK1 and ULK2 with IC $_{50}$s of 45 and 38 nM, respectively.

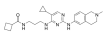
Purity: 99.00%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg, 100 mg

MRT68921

Cat. No.: HY-100006

Bioactivity: MRT68921 is the most potent inhibitor of **ULK1** and **ULK2**, with **IC_{50}** values of 2.9 nM and 1.1 nM, respectively.

Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

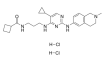


MRT68921 dihydrochloride

Cat. No.: HY-100006A

Bioactivity: MRT68921 dihydrochloride is the most potent inhibitor of **ULK1** and **ULK2**, with **IC_{50}** values of 2.9 nM and 1.1 nM, respectively.

Purity: 99.38%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water,
5 mg, 10 mg, 25 mg, 50 mg, 100 mg, 200 mg

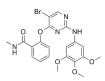


SBI-0206965

Cat. No.: HY-16966

Bioactivity: SBI-0206965 is a potent, selective and cell permeable autophagy kinase **ULK1** inhibitor with **IC_{50}** of 108 nM for ULK1 kinase and 711 nM for the highly related kinase ULK2 .

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



ULK-101

Cat. No.: HY-114490

Bioactivity: ULK-101 is a potent and selective **ULK1** inhibitor, with **IC_{50}** values of 1.6 nM and 30 nM for ULK1 and ULK2, respectively. ULK-101 suppresses autophagy and sensitizes cancer cells to nutrient stress [1].

Purity: 99.98%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO,
5 mg, 10 mg