

SBI-0206965

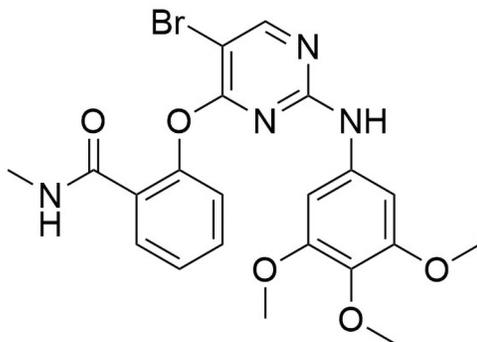
ULK1 and ULK2 kinase inhibitor

Catalog #100-0269	5 mg
Catalog #100-0270	10 mg

Product Description

SBI-0206965 is an inhibitor of the autophagy initiator kinases ULK1 and ULK2 (IC_{50} = 108 nM and 711 nM, respectively; Egan et al.). SBI-0206965 is also a potent inhibitor of AMP-activated protein kinase (AMPK), a positive regulator of autophagy (Dite et al.).

Alternative Names:	Not applicable
CAS Number (Model):	1884220-36-3
Chemical Formula:	$C_{21}H_{21}BrN_4O_5$
Molecular Weight:	489.3 g/mol
Purity:	≥ 98%
Chemical Name:	2-[[[5-bromo-2-[(3,4,5-trimethoxyphenyl)amino]-4-pyrimidinyl]oxy]-N-methyl-benzamide
Structure:	



Properties

Product Format:	A crystalline solid
Stability and Storage:	Product stable at -20°C as supplied. As a precaution, STEMCELL recommends storing all small molecules away from direct light. For long-term storage, store with a desiccant. Stable as supplied for 12 months from date of receipt.
Preparation:	<p>Solubility:</p> <ul style="list-style-type: none">· DMSO \leq 60 mM· Absolute ethanol \leq 2.0 mM <p>For example, to prepare a 10 mM stock solution in DMSO, resuspend 1 mg in 204 μL of DMSO.</p> <p>Prepare stock solution fresh before use. Information regarding stability of small molecules in solution has rarely been reported; however, as a general guide we recommend storage in DMSO at -20°C. Aliquot into working volumes to avoid repeated freeze-thaw cycles. The effect of storage of stock solution on compound performance should be tested for each application.</p> <p>Compound has low solubility in aqueous media. For use as a cell culture supplement, stock solution should be diluted into culture medium immediately before use. Avoid final DMSO or absolute ethanol concentration above 0.1% due to potential cell toxicity.</p>

Published Applications

CANCER RESEARCH

- Synergizes with mTOR inhibition to induce apoptosis and cell death in tumor cells (Egan et al.).
- Suppresses autophagy induced by mTOR inhibition (Egan et al.).
- Suppresses prosurvival autophagic responses in tumor cells through AMPK and ULK1 inhibition (Dite et al.).

References

- Dite TA et al. (2018) AMP-activated protein kinase selectively inhibited by the type II inhibitor SBI-0206965. *J Biol Chem* 293(23): 8874–85.
- Egan DF et al. (2015) Small molecule inhibition of the autophagy kinase ULK1 and identification of ULK1 substrates. *Mol Cell* 59(2): 285–97.

Related Products

For a complete list of small molecules available from STEMCELL Technologies, visit www.stemcell.com/smallmolecules or contact us at techsupport@stemcell.com.

Warning

This product is hazardous. Please refer to the Safety Data Sheet (SDS).

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