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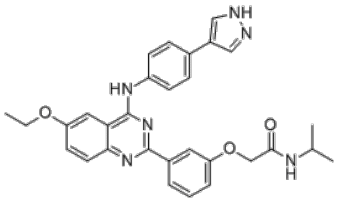
Data Sheet

Global Supplier of Chemical Probes, Inhibitors & Agonists.

Product Name	:	KL-11743
Cat. No.	:	PC-72556
CAS No.	:	1369452-53-8
Molecular Formula	:	$C_{30}H_{30}N_6O_3$
Molecular Weight	:	522.609
Target	:	Glucose Transporter (GLUT)
Solubility	:	10 mM in DMSO



Biological Activity

KL-11743 (KL11743) is a potent, selective, orally bioavailable inhibitor of **class I glucose transporters (GLUT)** with IC50 of 115/137/90/68 nM for GLUT1/2/3/4, respectively.
KL-11743 demonstrated no inhibitory activity at 10 uM against hexokinase.
KL-11743 inhibited both glucose consumption, lactate secretion, and 2DG transport in HT-1080 fibrosarcoma cells, with IC50 values of 228, 234, and 87 nM, respectively, and fully inhibited glycolytic ATP production in oligomycin-treated cells with an IC50 of 127 nM.
KL-11743 had minimal off-target activity in a panel of 85 high-liability receptors and transporters and 411 human kinases.
KL-11743 dose-dependently inhibits HT-1080 cells growth (IC50=667 nM), suppresses glucose metabolism and induces redox and energetic stress.
KL-11743 inhibits the growth of TCA cycle-deficient cancers in vitro and in vivo.

References

Kellen Olszewski, et al. ***Cell Chem Biol.*** 2021 Oct 22;S2451-9456(21)00441-4.

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