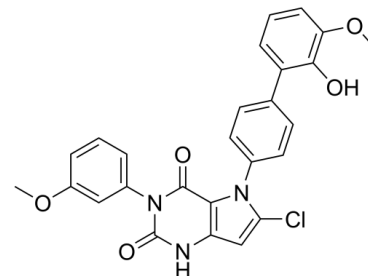


Data Sheet

Product Name:	GSK621
Cat. No.:	CS-0019693
CAS No.:	1346607-05-3
Molecular Formula:	C ₂₆ H ₂₀ ClN ₃ O ₅
Molecular Weight:	489.91
Target:	AMPK; Apoptosis; Autophagy
Pathway:	Apoptosis; Autophagy; Epigenetics; PI3K/Akt/mTOR
Solubility:	DMSO : 12.5 mg/mL (25.51 mM; ultrasonic and adjust pH to 1 with HCl)



BIOLOGICAL ACTIVITY:

GSK621 is a specific **AMPK** activator, with **IC₅₀** values of 13-30 μ M for AML cells. GSK621 induces **autophagy** and **apoptosis**. GSK621 induces **eiF2 α** phosphorylation-a hallmark of **UPR** activation^[1]. **In Vitro:** GSK621 (30 μ M) induces AMPK α T172, ACC (S79) and ULK1 (S555) phosphorylation^[1]. GSK621 (30 μ M) induces autophagy and apoptosis^[1]. GSK621 treatment also induces PERK phosphorylation, a marker of ER stress, in AML cells^[1]. **In Vivo:** GSK621 (30 mg/kg, ip twice daily) exhibits significant anti-tumor activity in MOLM-14 cells xenograft^[1].

References:

[1]. Pierre Sujobert, et al. Co-activation of AMPK and mTORC1 Induces Cytotoxicity in Acute Myeloid Leukemia. Cell Rep. 2015 Jun 9;11(9):1446-57.

CAIndexNames:

1H-Pyrrolo[3,2-d]pyrimidine-2,4(3H,5H)-dione, 6-chloro-5-(2'-hydroxy-3'-methoxy[1,1'-biphenyl]-4-yl)-3-(3-methoxyphenyl)-

SMILES:

O=C1NC2=C(N(C3=CC=C(C4=CC=CC(OC)=C4O)C=C3)C(Cl)=C2)C(N1C5=CC=CC(OC)=C5)=O

Caution: Product has not been fully validated for medical applications. For research use only.

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