

LGK974

产品编号: D50779

CAS: 1243244-14-5

分子式: C₂₃H₂₀N₆O

纯度: ≥98%

InChi: InChi=1S/C₂₃H₂₀N₆O/c1-15-9-17(12-28-23(15)18-5-6-25-16(2)10-18)11-22(30)29-21-4-3-19(13-27-21)20-14-24-7-8-26-20/h3-10,12-14H,11H₂,1-2H₃, (H,27,29,30)

InChi Key: XXYGTCZJJLTAGH-UHFFFAOYSA-N

Smiles: CC1C=C(C=CN=1)C1=NC=C(CC(=O)NC2C=CC(=CN=2)C2C=NC=CN=2)C=C1C

外观: 固体粉末

作用通路: Porcupine

溶解性: DMSO up to 100 mM

保存条件: Store in dry, dark place for one year.

产品介绍: LGK974 is a highly potent, selective and orally bioavailable Porcupine inhibitor (Wnt signaling antagonist) with an IC₅₀ ~0.4 nM. LGK974 potently inhibits Wnt signaling in vitro and in vivo, including reduction of the Wnt-dependent LRP6 phosphorylation and the expression of Wnt target genes, such as AXIN2. LGK974 is potent and efficacious in multiple tumor models at well-tolerated doses in vivo, including murine and rat mechanistic breast cancer models driven by MMTV-Wnt1 and a human head and neck squamous cell carcinoma model (HN30). We also show that head and neck cancer cell lines with loss-of-function mutations in the Notch signaling pathway have a high response rate to LGK974. All LGK974-sensitive pancreatic cancer cell lines carried inactivating mutations of RNF43. Currently LGK974 is in the Phase I study to treat cancers that are driven by the Wnt pathway in a Wnt ligand-dependent manner. LGK974 is a highly potent, selective and orally bioavailable Porcupine inhibitor (Wnt signaling antagonist) with an IC₅₀ ~0.4 nM. LGK974 potently inhibits Wnt signaling in vitro and in vivo, including reduction of the Wnt-dependent LRP6 phosphorylation and the expression of Wnt target genes, such as AXIN2. LGK974 is potent and efficacious in multiple tumor models at well-tolerated doses in vivo, including murine and rat mechanistic breast cancer models driven by MMTV-Wnt1 and a human head and neck squamous cell carcinoma model (HN30). We also show that head and neck cancer cell lines with loss-of-function mutations in the Notch signaling pathway have a high response rate to LGK974. All LGK974-sensitive pancreatic cancer cell lines carried inactivating mutations of RNF43. Currently LGK974 is in the Phase I study to treat cancers that are driven by the Wnt pathway in a Wnt ligand-dependent manner.