For Research Use Only Motesanib Diphosphate



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Catalog Number: CM06858

产品信息

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CAS号:

857876-30-3

分子式: C₂₂H₂₃N₅O⋅₂H₃PO₄

主要靶点: VEGFR|c-Kit

主要通路: 蛋白酪氨酸激酶|血管生成 分子量: 569.44 溶解度:

DMSO:93 mg/mL (163.3 mM),H2O:16 mg/mL (28.1 mM),Ethanol:<1 mg/mL H₂C CH₃

0H | | | 0==P--0

靶点活性

Kit:8 nM|VEGFR2/Flk1:6 nM|VEGFR1:2 nM|VEGFR2:3 nM|VEGFR3:6 nM

体外活性

在大鼠角膜模型中,每天口服两次(ED50=2.1 mg/kg)或一次(ED50=4.9 mg/kg) Motesanib Diphosphate能够抑制血管内皮生长因子诱导的血管生成.在头部和颈部鳞状细胞癌移植瘤模型中,Motesanib Diphosphate和辐射治疗联用,显示出显著地抗癌活性.

体内活性

在VEGF诱导的HUVECs细胞中(IC50 =10 nM),Motesanib Diphosphate 明显抑制细胞增殖。对于血小板衍生因子诱导的增殖(IC50=207 nM)和SCF诱导的c-kit磷酸化(IC50=37 nM),Motesanib Diphosphate能够显著抑制。人脐静脉内皮细胞,Motesanib Diphosphate增强细胞对于放射性的敏感程度。对人VEGFR家族,Motesanib Diphosphate具有广谱活性。

细胞实验

Cells are preincubated for 2 hours with different concentrations of Motesanib Diphosphate, and exposed with 50 ng/mL VEGF or 20 ng/mL bFGF for an additional 72 hours. Cells are washed twice with DPBS, and plates are frozen at -70 °C for 24 hours. Proliferation is assessed by the addition of CyQuant dye, and plates are read on a Victor 1420 workstation. IC50 data are calculated using the Levenberg-Marquardt algorithm into a four-parameter logistic equatio(Only for Reference)

描述

 $Motes an ib \ Diphosphate is the orally bioavailable \ diphosphate salt of a \ multiple-receptor tyrosine \ kinase \ inhibitor \ with potential antineoplastic activity.$

储存

Powder: -20°C for 3 years | In solvent: -80°C for 2 years