

Catalog Number: CM06632

产品信息

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CM06632

CAS号:
446859-33-2

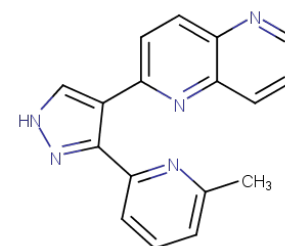
分子式:
C₁₇H₁₃N₅

主要靶点:
ALK|TGF-β|Smad

主要通路:
血管生成|蛋白酪氨酸激酶|干细胞

分子量:
287.32

溶解度:
H₂O:< 1 mg/mL (insoluble or slightly soluble); Ethanol:< 1 mg/mL (insoluble or slightly soluble); DMSO:15 mg/mL (52.21 mM)



靶点活性

TGF β RI:4 nM

体外活性

方法: 小鼠胚胎成纤维细胞 MEFs 用 RepSox (10 μM) 处理 10 天, 使用 oil red O 染色检测细胞脂肪。 **结果:** RepSox 处理的 MEFs 中出现了许多脂肪细胞样细胞, 脂滴的 oil red O 染色证实了脂肪细胞分化。 [1] **方法:** 绵羊成纤维细胞用 RepSox (10-25 nM) 处理 3 天, 使用显微镜观察细胞形态。 **结果:** 在 RepSox 处理三天后, 绵羊成纤维细胞获得了显著不同的形态, 并从纺锤形转变为具有更多聚束的细长形状。 [2]

体内活性

方法: 为检测对肠内神经胶质细胞 EGCs 分化的影响, 将 RepSox (3-10 mg/kg in 0.5% CMC-Na) 腹腔注射给 GFAP-Cre:Rosa26-tdTomato 小鼠, 每天一次, 持续两周。 **结果:** RepSox 可以促进 EGCs 转化为神经元, 并改善体内胃肠道运动。 [3] **方法:** 为检测体内抗肿瘤活性, 将 RepSox (5-20 mg/kg) 腹腔注射携带骨肉瘤 143B 的 nude 小鼠模型, 每两天一次, 持续三周。 **结果:** RepSox 有效地抑制了骨肉瘤的生长, 并且在裸鼠中具有低毒性。 [4]

细胞实验

RepSox is dissolved in DMSO and stored, and then diluted with appropriate media (DMSO 1%) before use [1]. To test anti-TGF-β activity of compounds, HepG2 cells are seeded in 96 well microplates at a concentration of 35000 cells per well in 200 μL of serum-containing medium. The microplates are then placed for 24 h in a cell incubator at 37°C, 5% CO₂ atm. RepSox dissolved in DMSO are then added at concentrations of 50 nM to 10 μM (final concentration of DMSO 1%) for 30 min prior to the addition of recombinant TGF-β (1 ng/mL). After an overnight incubation, the cells are washed with PBS and lysed by addition of 10 μL of passive lysis buffer. Inhibition of luciferase activity relative to control groups is used as a measure of compound activity. A concentration-response curve is constructed from which an IC₅₀ value is determined graphically [1].

储存

store at low temperature | Powder: -20°C for 3 years | In solvent: -80°C for 1 year | Shipping with blue ice.