

Catalog Number: CM00933

## 产品信息

**Catalog Number:**  
CM00933

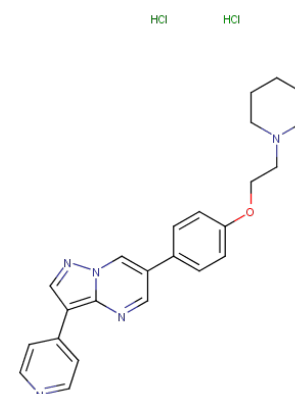
**CAS号:**  
1219168-18-9

**分子式:**  
C<sub>24</sub>H<sub>25</sub>N<sub>5</sub>O<sub>2</sub>HCl

**主要靶点:**  
AMPK|Autophagy|TGF-beta/Smad

**主要通路:**  
表观遗传|PI3K/Akt/mTOR 信号通路|自噬|干细胞

**分子量:**  
472.41

**溶解度:**  
DMSO:6.88 mg/mL (14.55 mM);H<sub>2</sub>O:47.2 mg/mL (99.91 mM)


## 靶点活性

AMPK:109 nM (cell free)

## 体外活性

**方法:** 人肿瘤细胞 HeLa 和 HCT116 用 Dorsomorphin dihydrochloride (1.25-80 μM) 处理 24 h, 使用 CCK-8 assay 检测细胞活力。 **结果:** Dorsomorphin 抑制 HeLa 和 HCT116 细胞的活力, IC<sub>50</sub> 值分别为 10.71 μM 和 11.34 μM。 [1] **方法:** ATL 患者来源的 PBMCs 细胞用 Dorsomorphin dihydrochloride (5-25 μM) 处理 24 h, 使用 Flow Cytometry 检测细胞凋亡情况。 **结果:** Dorsomorphin 以剂量依赖的方式增加了急性和慢性型 ATL 患者 PBMC 中早期凋亡细胞的频率。 [2]

## 体内活性

**方法:** 为检测体内抗肿瘤活性, 将 Dorsomorphin dihydrochloride (10 mg/kg) 腹腔注射给携带人类肿瘤 S1T 的 NOD/SCID 小鼠, 每天一次, 持续二十八天。 **结果:** Dorsomorphin 抑制了 NOD/SCID 小鼠中人 ATL 肿瘤异种移植物的生长。 [2] **方法:** 为检测体内对 SMAD 活性的影响, 将 Dorsomorphin dihydrochloride (10 mg/kg) 单次腹腔注射给 iron-dextran 处理的 C57BL/6 小鼠。 **结果:** Dorsomorphin 消除了 iron-dextran 引起的铁介导的肝脏 SMAD1/5/8 磷酸化的增加。 [3]

## 动物实验

12-week-old C57BL/6 mice raised on a standard diet were injected via the tail vein with 0.2 g kg<sup>-1</sup> of dextran (average MW = 5,000) or 0.2 g kg<sup>-1</sup> of iron-dextran USP. Dextran was injected with vehicle only, whereas iron-dextran was injected with either vehicle or dorsomorphin (10 mg/kg). 1 h after injection, mice were killed and liver segments were collected in 500 μl of SDS-lysis buffer and mechanically homogenized. 20 μl of liver extracts were resolved by SDS-PAGE and immunoblotted. Total RNA was harvested using Trizol from mechanically homogenized mouse livers (6 h after injection with a single intraperitoneal dose of dorsomorphin (10 mg/kg) or DMSO) [3].

## 细胞实验

C2C12 cells were seeded into 96-well plates at 2,000 cells per well in DMEM supplemented with 2% FBS. Wells were treated in quadruplicate with BMP ligands and dorsomorphin or vehicle. Cells were harvested after 5 d in culture with 50 μl Tris-buffered saline, 1% Triton X-100. Lysates were added to p-nitrophenylphosphate reagent in 96-well plates for 1 h, and alkaline phosphatase activity expressed as absorbance at 405 nm. Cell viability and quantity were measured by Cell-titer Glo and binding of nuclear dye CyQuant, respectively, using replicate wells treated identically to those used for alkaline phosphatase measurements [3].

## 储存

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