

Catalog Number: CM10834

## 产品信息

**Catalog Number:**  
CM10834

**CAS号:**  
1637443-98-1

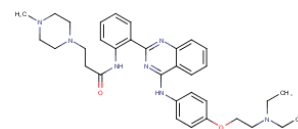
**分子式:**  
C<sub>34</sub>H<sub>43</sub>N<sub>7</sub>O<sub>2</sub>

**主要靶点:**  
VEGFR

**主要通路:**  
血管生成|蛋白酪氨酸激酶

**分子量:**  
581.75

**溶解度:**  
DMSO:5.82 mg/mL (10 mM)



## 体外活性

hVEGF-IN-1与hVEGF-A mRNA的5' -UTR内富G区域有显著选择性作用并破坏G-四联体结构。hVEGF-IN-1与IRES-A (WT) 结合 (Kd: 0.928 μM), 并与发夹DNA结合 (Kd: 21.2 μM)。IRES-A的5' -UTR内G富序列G774-G790对IRES-A的翻译启动活性至关重要。hVEGF-IN-1阻碍BG4与细胞内IRES-A RNA G-四联体的结合。通过IRES-A mRNA内的G-四联体, hVEGF-IN-1下调hVEGF-A的翻译。hVEGF-IN-1使MDA-MB-231细胞迁移减少至约25%。

## 体内活性

在携带肿瘤的小鼠中, hVEGF-IN-1能使平均肿瘤体积减少至少于300 mm<sup>3</sup>。在hVEGF-IN-1存在下, 肿瘤重量平均减少60.1%, 最终重量达到0.18g, 同时, 小鼠的体重没有明显变化。

## 动物实验

Mice are separated into three groups: negative control, compound 1-treated, and positive control (doxorubicin-treated). hVEGF-IN-1, doxorubicin, and saline are administered by intraperitoneal injection to athymic nude mice with human tumor xenografts established using MCF-7 breast cancer cells. Mice are injected intraperitoneal once a day for 20 days. Negative controls are injected with 150 μL of saline. The positive control group received doxorubicin by intraperitoneal injection at a dose of 1 mg/kg. hVEGF-IN-1 is similarly administered to mice at a dose of 7.5 mg/kg. After treating the animals for 20 days, the tumor tissues are collected and IHC assays are conducted using an anti-VEGF-A antibody[1].

## 细胞实验

MDA-MB-231 cells are plated in the top chambers of 0.8 μm pore trans-wells in Opti-MEM reduced serum medium in the presence or absence of hVEGF-IN-1. Meanwhile, 600 μL of DMEM containing 10% fetal bovine serum (FBS) and 100 μM CoCl<sub>2</sub> are added to the lower chambers. The cells are allowed to migrate for 24 h. At the end of the assay, the cells in the top chamber are removed, and the cells at the bottom of the filter are treated by adding 500 μL of DMEM containing 2.5 mg/mL MTT to each well. After incubating at 37 °C with 5% CO<sub>2</sub> for 4 h, 500 μL of DMSO is added to each well and the plate is gently rotated for 10 min. Absorbance (570 nm) is measured using a microplate reader.

## 储存

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