

Catalog Number: CM06710

## 产品信息

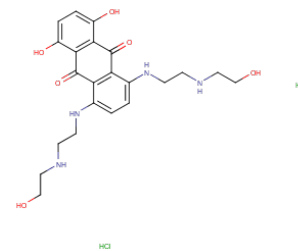
**Catalog Number:**  
CM06710

**CAS号:**  
70476-82-3

**分子式:**  
C<sub>22</sub>H<sub>30</sub>Cl<sub>2</sub>N<sub>4</sub>O<sub>6</sub>
**主要靶点:**  
Topoisomerase|PKC

**主要通路:**  
DNA损伤和修复|表观遗传|细胞骨架

**分子量:**  
517.4

**溶解度:**  
H<sub>2</sub>O:2.6 mg/mL (5 mM),DMSO:38.8 mg/mL (75 mM)


## 靶点活性

kinase C (PKC):8.5 μM

## 体外活性

Methotrexate在小鼠气囊炎模型中,Methotrexate的IC<sub>50</sub>为每周0.08 mg/kg.

## 体内活性

Methotrexate能够抑制嘌呤和嘧啶的从头合成,多胺的形成以及DNA、RNA、磷脂和蛋白质的转甲基作用。Methotrexate抑制胸苷酸合成酶,使细胞内胸苷酸不足,最终导致抗增殖的细胞毒性作用。Methotrexate通过主动转运或易化扩散进入细胞,在细胞内经过多聚谷氨酸化后,会抑制二氢叶酸还原酶和二氢叶酸转化为四氢叶酸。

## 细胞实验

The human breast carcinoma cell lines MDA-MB-231 and MCF-7 are seeded in standard 96-well plates. One day after seeding, the culture medium is changed and replaced by medium containing different concentration of Mitoxantrone (10-5 to 5 μM) with or without DHA (30 μM) during 7 days. Viability of cells are measured as a whole by the tetrazolium salt assay[3].

## 描述

Mitoxantrone dihydrochloride (NSC-301739) is the hydrochloride salt of an anthracenedione antibiotic with antineoplastic activity. It is a type II topoisomerase inhibitor.

## 储存

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