

Catalog Number: CM00221

## 产品信息

**Catalog Number:**  
CM00221

**CAS号:**  
89464-63-1

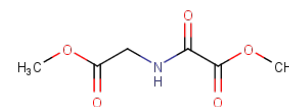
**分子式:**  
C<sub>6</sub>H<sub>9</sub>NO<sub>5</sub>

**主要靶点:**  
Autophagy|HIF|HIF/HIF Prolyl-Hydroxylase

**主要通路:**  
表观遗传|代谢|自噬|血管生成

**分子量:**  
175.14

**溶解度:**  
Ethanol:35 mg/mL (199.84 mM), H<sub>2</sub>O:17.54mg/mL (100 mM), Need ultrasound, DMSO:17.5 mg/mL (100 mM)



## 体外活性

DMOG shows only weakly active in the microsomal system, but efficiently suppresses hydroxyproline synthesis in intact cells. [1] DMOG reduces FGF-2-induced proliferation and cyclin A expression by inhibiting prolyl hydroxylase activity in HPASMC. [3]

## 体内活性

DMOG inhibits endogenous HIF inactivation and induces angiogenesis in the ischaemic skeletal muscles of mice. [2] Up-regulation of hypoxia-inducible factor-1  $\alpha$  by DMOG may be the cardioprotective mechanism of ischemic postconditioning in hypertensive rats [4].

## 细胞实验

To analyze DNA synthesis as an index of cellular proliferation, VSMC are plated in 48-well plates (5,000 per square centimeter) in growth medium, incubated overnight, and serum-deprived (1% FCS) for 24 h. Replicate wells are then stored at 8 minus; 70 deg; C for baseline (day 0) cell counts, and fresh medium with or without growth factors is added to the remaining wells, which are incubated 72-96 h in 20 or 5% O<sub>2</sub>. Days 0 and 3 or 4 cell counts are determined by lysing cells in a buffer containing a fluorescent dye, which has minimal fluorescence by itself but fluoresces when bound to DNA or RNA. Absolute cell numbers are calculated by comparing the fluorescence of specimens with that of a standard curve similarly prepared using a known number of cells. (Only for Reference)

## 描述

DMOG, an antagonist of the  $\alpha$ -ketoglutarate cofactor, is an inhibitor for HIF prolyl hydroxylase.

## 储存

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