

Catalog Number: CM00181

## 产品信息

**Catalog Number:**  
CM00181

**CAS号:**  
55779-48-1

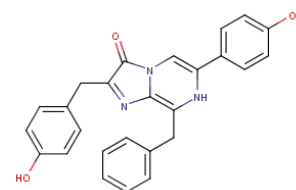
**分子式:**  
 $C_{26}H_{21}N_3O_3$

**主要靶点:**  
Others

**主要通路:**  
其他

**分子量:**  
423.46

**溶解度:**  
H<sub>2</sub>O:< 1 mg/mL (insoluble or slightly soluble); Ethanol:1 mg/mL (2.36 mM)



## 体外活性

在监测多种生物学过程时，coelenterazine (CTZ) 可以被海葵 *Renilla reniformis* (Rluc) 和海洋杧足类 *Gussia princeps* (Gluc) 等 luciferases 催化，产生蓝色光线发射。在表达 Gli36-Gluc或Gli36-Rluc的 Gli36细胞中，coelenterazine展现出生物发光信号。[1] 在RIN-5F、4T1、HCT 116、HEK 293、293FT、HeLa 和 INS-1细胞中，coelenterazine可用于检测超氧阴离子浓度。[2]

## 体内活性

方法：将 Gli36-Gluc 和 Gli36-Rluc 细胞注射到裸鼠的腿部肌肉中 小鼠静脉注射100  $\mu$ g (4mg / kg体重) Coelenterazine，并立即使用冷却电荷耦合器件 (CCD) 相机成像；向上述小鼠注射了500  $\mu$ g (20mg / kg) 水溶性Coelenterazine，并使用CCD相机对它们进行成像。结果：水溶性Coelenterazine对Gluc的光子数高出10倍，对Rluc的光子数高出4倍，表明s-Coelenterazine在体内检测腔肠酸荧光素酶方面更敏感。[1]

## 动物实验

Mice are anesthetized with metofane or isoflurane before tail vein injection of Coelenterazine (4  $\mu$ g/g) formulated from an ethanol stock diluted in sodium phosphate buffer (50 mM). Bioluminescence imaging is performed on the in vivo imaging system at 2, 6, 8, and 11 min after injection. Anesthesia is maintained during imaging by nose cone delivery of 2.5% isoflurane. After imaging, animals are killed by cervical dislocation; tumors are then harvested and weighed. They are for reference only.

## 细胞实验

Cells are plated at a density of  $5 \times 10^4$  cells per well into 24-well plates and grown to 80-100% confluency. Just before imaging, media are changed to a colorless solution containing (in mM): 2.7 KCl, 139 NaCl, 8.1 Na<sub>2</sub>HPO<sub>4</sub>, 0.7 H<sub>2</sub>O, 1.5 KH<sub>2</sub>PO<sub>4</sub>, 1.8 CaCl<sub>2</sub>, 1 MgCl<sub>2</sub> and 5.5 d-glucose. Cells are preincubated for 15 min in the absence or presence of Pgp modulator, after which Coelenterazine (final concentration of 470 nM) is added directly to the cells. They are for reference only.

## 储存

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