



碧云天生物技术/Beyotime Biotechnology  
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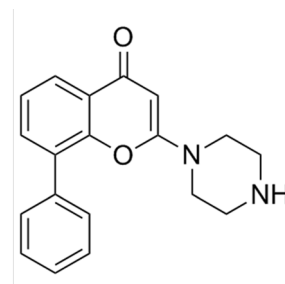
## LY303511 (mTOR抑制剂)

产品编号	产品名称	包装
SF2816-10mM	LY303511 (mTOR抑制剂)	10mM×0.2ml
SF2816-5mg	LY303511 (mTOR抑制剂)	5mg
SF2816-25mg	LY303511 (mTOR抑制剂)	25mg

### 产品简介:

#### ➤ 化学信息:

化学名	8-phenyl-2-piperazin-1-ylchromen-4-one
简称	LY303511
别名	LY-303511, LY303511
中文名	N/A
化学式	C <sub>19</sub> H <sub>18</sub> N <sub>2</sub> O <sub>2</sub>
分子量	306.36
CAS号	154447-38-8
纯度	98%
溶剂/溶解度	Water <1mg/ml; DMSO 30.6mg/ml; Ethanol <1mg/ml
溶液配制	5mg加入1.63ml DMSO, 或每3.06mg加入1ml DMSO, 配制成10mM溶液。SF2816-10mM用DMSO配制。



#### ➤ 生物信息:

产品描述	LY303511, an inactive analogue of LY294002, is a mTOR inhibitor that did not inhibit PI3-K.
信号通路	PI3K/Akt/mTOR
靶点	— — — — —
IC50	— — — — —
体外研究	100μM LY303511 significantly reduced the fraction of cells in S phase. The proportion of cells in G2/M remained unchanged, indicating that cells were arrested in both G1 and G2/M. In contrast, rapamycin increased the G1 population by reducing the proportion of cells in both S and G2/M. The effects of 10μM LY303511 and rapamycin on the reduction in S phase cells were additive to that of 10μM LY303511 alone (P=0.056). In MIN6 insulinoma cells, wortmannin (100nM) had no effect on whole-cell outward K <sup>+</sup> currents, but LY294002 and LY303511 reversibly blocked currents in a dose-dependent manner (IC <sub>50</sub> =9.0±0.7mM and 64.6±9.1mM, respectively). Western blotting confirmed the specific inhibitory effects of LY294002 and wortmannin on insulin-stimulated PI3K activity. Both LY294002 and LY303511 increased the activity of protein kinase A (PKA). Moreover, PKA blockade by the small molecule inhibitor H89 decreased the LY294002/LY303511-mediated increase in GJIC.
体内研究	PND4 ovaries were cultured for 8 days in control medium or medium containing VCD (30μM) in the presence or absence of LY303511 (20μM). Incubation with LY303511 alone caused a reduction (P<0.05) in primordial and small primary follicle numbers. On the other hand, whereas VCD alone depleted (P<0.05) primordial and small primary follicle numbers, this depletion was not prevented by co-incubation with LY303511.
临床实验	N/A
特征	N/A

#### ➤ 相关实验数据(此数据来自于公开文献, 碧云天并不保证其有效性):

酶活性检测实验	
方法	N/A

细胞实验	
细胞系	N/A
浓度	N/A
处理时间	N/A

方法	N/A
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动物实验	
动物模型	N/A
配制	N/A
剂量	N/A
给药方式	N/A

➤ **参考文献:**

- 1.Kristof AS, Pacheco-Rodriguez G, Schremmer B. J Pharmacol Exp Ther. 2005 Sep, 314(3), 1134-43.
- 2.El-Kholy W, Macdonald PE, Lin JH. FASEB J. 2003 Apr, 17(6), 720-2.
- 3.Bodenstine TM, Vaidya KS, Ismail A. Cancer Res. 2010 Dec 1, 70(23), 10002-11.
- 4.Keating AF, J Mark C, Sen N. Toxicol Appl Pharmacol. 2009 Dec 1, 241(2), 127-34.

**包装清单:**

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—	说明书	1份

**保存条件:**

-20°C保存，至少一年有效。5mg和25mg包装也可以室温保存，至少6个月有效。如果溶于非DMSO溶剂，建议分装后-80°C保存，预计6个月有效。

**注意事项:**

- 本产品仅限于专业人员的科学研究用，不得用于临床诊断或治疗，不得用于食品或药品，不得存放于普通住宅内。
- 为了您的安全和健康，请穿实验服并戴一次性手套操作。

**使用说明:**

1. 收到产品后请立即按照说明书推荐的条件保存。使用前可以在2,000-10,000g离心数秒，以使液体或粉末充分沉淀至管底后再开盖使用。
2. 对于10mM溶液，可直接稀释使用。对于固体，请根据本产品的溶解性及实验目的选择相应溶剂配制高浓度的储备液(母液)后使用。
3. 具体的最佳工作浓度请参考本说明书中的体外、体内研究结果或其他相关文献，或者根据实验目的，以及所培养的特定细胞和组织，通过实验进行摸索和优化。
4. 不同实验动物依据体表面积等效剂量转换表请参考如下网页：

<http://www.beyotime.com/support/animal-dose.htm>

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