



上海源叶生物科技有限公司
Shanghai yuanye Bio-Technology Co., Ltd
电话: 021-61312973 传真: 021-55068248
网址: www.shyuanye.com
邮箱: shyysw@sina.com

产品名称: 3-[[叔丁氧羰基]氨基]-5-氟-4-氧代戊酸甲酯
产品别名: BOC-D-FMK

生物活性:					
Description	Boc-D-FMK is a cell-permeable, irreversible and broad spectrum caspase inhibitor; inhibits apoptosis stimulated by TNF-α with an IC ₅₀ of 39 μM.				
IC ₅₀ & Target	Caspase				
In Vitro	Apoptosis is a pathway of cell death orchestrated by a family of proteases called caspases. Boc-D-fmk inhibits TNFα-stimulated reactive oxygen species (ROS) generation. Boc-D-FMK inhibits apoptosis stimulated by TNF-α with an IC50 of 39 μM[1]. BocD-fmk at 50 μM prevents genistein-induced apoptosis of p815 cells. Confocal microscopy shows that the release of mitochondrial apoptotic factors is inhibited by BocD-fmk[2].				
In Vivo	Boc-D-FMK-fmk effectively attenuates the hepatocyte apoptosis in bile duct-ligated rats and may improve the survival rates after endotoxin challenge[3]. A single injection of Boc-D-FMK results in longterm protection of MNs against root avulsion-induced death for more than 8 weeks and the Boc-D-FMK-treated MNs are able to regenerate their axons into an implanted PN graft and reinnervate the target muscle[4].				
Solvent&Solubility	In Vitro: DMSO : ≥ 125 mg/mL (474.82 mM) * "≥" means soluble, but saturation unknown.				
	Preparing Stock Solutions	Solvent / Mass Concentration	1 mg	5 mg	10 mg
		1 mM	3.7985 mL	18.9926 mL	37.9853 mL
		5 mM	0.7597 mL	3.7985 mL	7.5971 mL
		10 mM	0.3799 mL	1.8993 mL	3.7985 mL
	*请根据产品在不同溶剂中的溶解度选择合适的溶剂配制储备液; 一旦配成溶液, 请分装保存, 避免反复冻融造成的产品失效。 储备液的保存方式和期限: -80°C, 6 months; -20°C, 1 month。 -80°C 储存时, 请在 6 个月内使用, -20°C 储存时, 请在 1 个月内使用。				
References	[1]. Cowburn AS, et al. z-VAD-fmk augmentation of TNF alpha-stimulated neutrophil apoptosis is compound specific and does not involve the generation of reactive oxygen species. [2]. Yee SB, et al. zVAD-fmk, unlike BocD-fmk, does not inhibit caspase-6 acting on 14-3-3/Bad pathway in apoptosis of p815 mastocytoma cells. Exp Mol Med. 2006 Dec 31;38(6):634-42. [3]. Sheen-Chen SM, et al. Effect of Boc-D-Fmk on hepatocyte apoptosis after bile duct ligation in rat and survival rate after endotoxin challenge. J Gastroenterol Hepatol. 2008 Aug;23(8 Pt 1):1276-9. [4]. Chan YM, et al. Inhibition of caspases promotes long-term survival and reinnervation by axotomized spinal motoneurons of denervated muscle in newborn rats. Exp Neurol. 2003 Jun;181(2):190-203.				
实验参考:					
	Rats: Boc-D-FMK is dissolved in DMSO. Male Sprague-Dawley rats group 1 (OBBOC-D) undergo common bile duct ligation and simultaneously treatment with Boc-D-FMK. The first dose of				



上海源叶生物科技有限公司
Shanghai yuanye Bio-Technology Co., Ltd
电话: 021-61312973 传真: 021-55068248
网址: www.shyuanye.com
邮箱: shyysw@sina.com

Animal Administration	Boc-D-FMK (1.5 mg/kg) is injected into the inferior vena cava immediately after bile duct ligation. Subsequent doses of Boc-DFMK (1.5 mg/kg twice daily) are given intraperitoneally on the first and second postoperative days. The last dose (1.5 mg/kg) is given on the morning of the third postoperative day[3].
References	[1]. Cowburn AS, et al. z-VAD-fmk augmentation of TNF alpha-stimulated neutrophil apoptosis is compound specific and does not involve the generation of reactive oxygen species. [2]. Yee SB, et al. zVAD-fmk, unlike BocD-fmk, does not inhibit caspase-6 acting on 14-3-3/Bad pathway in apoptosis of p815 mastocytoma cells. Exp Mol Med. 2006 Dec 31;38(6):634-42. [3]. Sheen-Chen SM, et al. Effect of Boc-D-Fmk on hepatocyte apoptosis after bile duct ligation in rat and survival rate after endotoxin challenge. J Gastroenterol Hepatol. 2008 Aug;23(8 Pt 1):1276-9. [4]. Chan YM, et al. Inhibition of caspases promotes long-term survival and reinnervation by axotomized spinal motoneurons of denervated muscle in newborn rats. Exp Neurol. 2003 Jun;181(2):190-203.

源叶生物