

产品名称: **BAX Activator Molecule 7**

产品别名: **BAM7**

生物活性:					
Description	BAM7 is a direct and selective activator of proapoptotic BAX with an IC ₅₀ of 3.3 μM.				
IC ₅₀ & Target [1]	Bax				
	3.3 μM (IC ₅₀)				
In Vitro	BAM7 is selective for the BH3-binding site on BAX. BAM7 activates BAX and BAX-dependent cell death. Whereas treatment with BAX or BAM7 alone has no effect on the liposomes, the combination of BAM7 and BAX yields dose-responsive liposomal release of entrapped fluorophore. BAM7 dose- and time-responsively impairs the viability of <i>Bak</i>^{-/-} MEFs that exclusively express BAX but has no effect on <i>Bak</i>^{-/-} MEFs that contain BAK but lack BAX. In contrast, standard proapoptotic stimuli such as serum withdrawal, Staurosporine and Etoposide induces an equivalent apoptotic response in <i>Bax</i>^{-/-} and <i>Bak</i>^{-/-} MEFs. As further evidence of BAM7 specificity of action, (i) BAM7 does not affect the viability of <i>Bax</i>^{-/-} <i>Bak</i>^{-/-} MEFs; (ii) ANA-BAM16, which does not bind or activate BAX, has no effect on <i>Bak</i>^{-/-}MEFs; and (iii) BAM7 selectively induces cell death of <i>Bax</i>^{-/-} <i>Bak</i>^{-/-} MEFs reconstituted with wild-type BAX but not BAXK21E , which bears the mutation that abrogates BAM7 binding [1].				
Solvent&Solubility	In Vitro: DMSO : 5 mg/mL (12.33 mM; Need ultrasonic)				
	Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
		1 mM	2.4663 mL	12.3314 mL	24.6627 mL
		5 mM	0.4933 mL	2.4663 mL	4.9325 mL
		10 mM	0.2466 mL	1.2331 mL	2.4663 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℃, 6 months; -20℃, 1 month。-80℃ 储存时，请在 6 个月内使用，-20℃ 储存时，请在 1 个月内使用。 In Vivo: 请根据您的实验动物和给药方式选择适当的溶解方案。以下溶解方案都请先按照 In Vitro 方式配制澄清的储备液，再依次添加助溶剂： ——为保证实验结果的可靠性，澄清的储备液可以根据储存条件，适当保存；体内实验的工作液，建议您现用现配，当天使用； 以下溶剂前显示的百分比是指该溶剂在您配制终溶液中的体积占比；如在配制过程中出现沉淀、析出现象，可以通过加热和/或超声的方式助溶				
	1.请依序添加每种溶剂： 10% DMSO →90% corn oil Solubility: ≥ 0.5 mg/mL (1.23 mM); Clear solution 此方案可获得 ≥ 0.5 mg/mL (1.23 mM, 饱和度未知) 的澄清溶液，此方案不适用于实验周期在半个月以上的实验。 以 1 mL 工作液为例，取 100 μL 5.0 mg/mL 的澄清 DMSO 储备液加到 900 μL 玉米油中，混合均匀。				
References	[1]. Gavathiotis E, et al. Direct and selective small-molecule activation of proapoptotic BAX. Nat Chem Biol. 2012 Jul;8(7):639-45.				
实验参考:					

Cell Assay	MEF cells are maintained in DMEM high glucose supplemented with 10% (v/v) FBS, 100 U/mL Penicillin, 100 µg/mL Streptomycin, 2 mM L-glutamine, 50 mM HEPES, 0.1 mM MEM nonessential amino acids and 50 µM β-mercaptoethanol. MEFs (2.5×10 ³ cells per well) are seeded in 96-well opaque plates for 18-24 h and then incubated with serial dilutions of BAM7 (3.75, 5, 7.5, 10 and 15 µM), ANA-BAM16 or vehicle (0.15% (v/v) DMSO) in DMEM at 37°C in a final volume of 100 µL. Cell viability is assayed at 24 h by addition of CellTiter-Glo reagent, and luminescence is measured using a SpectraMax M5 microplate reader. Viability assays are performed in at least triplicate, and the data are normalized to vehicle-treated control wells [1].
References	[1]. Gavathiotis E, et al. Direct and selective small-molecule activation of proapoptotic BAX. <u>Nat Chem Biol.</u> 2012 Jul;8(7):639-45.



源叶生物