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产品名称: **BMX-IN-1**
产品别名: **BMX kinase inhibitor**

生物活性:					
Description	BMX-IN-1 is a selective, irreversible inhibitor of bone marrow tyrosine kinase on chromosome X (BMX) that targets Cys ⁴⁹⁶ in the BMX ATP binding domain with an IC ₅₀ of 8 nM, also targets the related Bruton's tyrosine kinase (BTK)with an IC ₅₀ value of 10.4 nM, but is more than 47-656-fold less potent against Blk, JAK3, EGFR, Itk, or Tec activity.				
IC ₅₀ & Target	IC50: 8 nM (BMX), 10.4 nM (BTK)				
In Vitro	BMX-IN-1 inhibits the proliferation of Tel-BMX-transformed Ba/F3 cells and RV-1 cells with IC ₅₀ s of 25 nM and 2.53 μM. BMX-IN-1 exhibits remarkable selectivity with an S(10) score of 0.01. BMX-IN-1 inhibits only wild-type BMX with an IC ₅₀ of 138 nM. BMX-IN-1 requires covalent modification of Cys ⁴⁹⁶ of BMX to achieve potent inhibition ^[1] .				
Solvent&Solubility	<i>In Vitro:</i> DMSO : ≥ 20 mg/mL (38.13 mM) * "≥" means soluble, but saturation unknown.				
	Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
		1 mM	1.9063 mL	9.5313 mL	19.0625 mL
		5 mM	0.3813 mL	1.9063 mL	3.8125 mL
		10 mM	0.1906 mL	0.9531 mL	1.9063 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]. Feiyang Liu , et al. Discovery of a Selective Irreversible BMX Inhibitor for Prostate Cancer. ACS Chem. Biol., DOI: 10.1021/cb4000629				
实验参考:					
Cell Assay	RV-1 cells in complete or serum-reduced DMEM are treated with DMSO, BMX-IN-1 (2.5 μM), MK2206 (200 nM), or the combination of BMX-IN-1 and MK2206 for 5 days before cells are harvested by trypsin and washed with cold PBS. The cells are then fixed in 70% cold ethanol (prechilled at -20°C) and incubated at 4°C overnight. On the day of flow cytometry, cells are collected by centrifugation, washed with PBS, and stained in 50 μg/mL propidium iodide + 0.5 mg/mL RNase in PBS + 0.5% Triton-X100 for 30 min at RT and moved to 4°C until the time of analysis. Flow cytometry is performed using a BD FACScan, and results are analyzed by ModFit software in the Flow Cytometry Core Facility in Dana-Faber Cancer Institute.				
References	[1]. Feiyang Liu , et al. Discovery of a Selective Irreversible BMX Inhibitor for Prostate Cancer. ACS Chem. Biol., DOI: 10.1021/cb4000629				