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产品名称: **tBID**
产品别名: **tBID**

生物活性:				
Description	tBID is a selective inhibitor of homeodomain-interacting protein kinase 2 (HIPK2) with an IC ₅₀ of 0.33 μM.			
IC ₅₀ & Target	IC50: 0.33 μM (HIPK2) ^[1]			
In Vitro	Homeodomain-interacting protein kinase 2 (HIPK2) is a Ser/Thr kinase controlling cell proliferation and survival. TBID, displays toward HIPK2 unprecedented efficacy (IC ₅₀ =0.33 μM) and selectivity (Gini coefficient 0.592 out of a panel of 76 kinases). The two other members of the HIPK family, HIPK1 and HIPK3, are also inhibited by TBID albeit less efficiently than HIPK2. The mode of action of TBID is competitive with respect to ATP, consistent with modelling. TBID interacts with the hinge region through hydrophobic interactions between Val 213, Val 261, Phe 277, Leu 280, Met 331, Ile 345, and the tetrabromine moiety, while the symmetric nitrogen atom at position 3 interacts with the catalytic Lys 228, thus playing a crucial role in the binding architecture ^[1] .			
Solvent&Solubility	In Vitro: DMSO : 26 mg/mL (49.17 mM; Need ultrasonic and warming)			
	Preparing Stock Solutions	Solvent	Mass	
		Concentration		
			1 mg	5 mg
			10 mg	
		1 mM	1.8911 mL	9.4557 mL
	5 mM	0.3782 mL	1.8911 mL	
	10 mM	0.1891 mL	0.9456 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]. Cozza G, et al. Synthesis and properties of a selective inhibitor of homeodomain-interacting protein kinase 2 (HIPK2). PLoS One. 2014 Feb 24;9(2):e89176.			
实验参考:				
Cell Assay	HepG2 cells (human hepatocellular carcinoma) are cultured in Dulbecco's modified Eagle's medium supplemented with 10% fetal calf serum, 2 mM L-glutamine, 100 unit/mL penicillin and 100 μg/mL streptomycin. Treatments with TBID are performed in the same medium but with 1% fetal calf serum; control cells are treated with the solvent (DMSO). Cell viability is evaluated by means of MTT ^[1]			
References	[1]. Cozza G, et al. Synthesis and properties of a selective inhibitor of homeodomain-interacting protein kinase 2 (HIPK2). PLoS One. 2014 Feb 24;9(2):e89176.			