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产品名称: **ICA-069673**
产品别名: **ICA-069673**

生物活性:				
Description	ICA-069673 is a KCNQ2/Q3 potassium channel activator with an IC ₅₀ of 0.69 μM.			
IC ₅₀ & Target	IC50: 0.69 μM (KCNQ2/Q3 potassium channel)[1]			
In Vitro	ICA-069673 is found to be 20-fold selective for KCNQ2/Q3 over KCNQ3/Q5 and has no measurable activity against a panel of cardiac ion channels (IC50 values > 30 μM for hERG, Nav1.5, L type channels, and KCNQ1) as well as no activity on GABA(A) gated channels at 10 μM[1]. ICA-069673 exhibits much stronger effects on KCNQ2 channels, including a large hyperpolarizing shift of the voltage-dependence of activation, an 2-fold enhancement of peak current and pronounced subtype specificity for KCNQ2 over KCNQ3. Based on ICA73 sensitivity of chimeric constructs of the transmembrane segments of KCNQ2 and KCNQ3, this drug appears to interact with the KCNQ2 voltage sensor (S1-S4)[2].			
Solvent&Solubility	In Vitro: DMSO : ≥ 34 mg/mL (126.10 mM) <small>* "≥" means soluble, but saturation unknown.</small>			
	<div>Preparing Stock Solutions</div>	<div>Solvent Mass Concentration</div>	1 mg	5 mg
		1 mM	3.7088 mL	18.5439 mL
		5 mM	0.7418 mL	3.7088 mL
		10 mM	0.3709 mL	1.8544 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]. Wickenden AD, et al. N-(6-chloro-pyridin-3-yl)-3,4-difluoro-benzamide (ICA-27243): a novel, selective KCNQ2/Q3 potassium channel activator. Mol Pharmacol. 2008 Mar;73(3):977-86. Epub 2007 Dec 18. [2]. Wang AW, et al. Sequence determinants of subtype-specific actions of KCNQ channel openers. J Physiol. 2017 Feb 1;595(3):663-676.			