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产品名称：L-779450
产品别名：L-779450

生物活性：

Description	L-779450 is a potent and selective B-Raf kinase inhibitor with a Kd of 2.4 nM.
IC_{50} & Target	B-Raf
	2.4 nM (Kd)
In Vitro	L-779450 (L-779,450) shows a high degree of specificity towards Raf. The only other tested kinase inhibited is p38MAPK, which has a kinase domain structurally related to Raf. L-779450 inhibits anchorage-independent growth of human tumor lines at doses ranging from 0.3 to 2 μM[2]. The effects of L-779450 (L-779,450) on TRAIL sensitivity are investigated here in melanoma cell lines with high TRAIL sensitivity (A-375 and SK-Mel-147), moderate sensitivity (Mel-HO, SK-Mel-13, and SK-Mel-28), and permanent resistance (MeWo, Mel-2a, and SK-Mel-103), as well as in TRAIL-selected cell lines with acquired resistance (A-375-TS and Mel-HO-TS). Despite only moderate direct effects of L-779450 on apoptosis, it strongly enhances TRAIL-induced apoptosis in sensitive melanoma cells and overrules TRAIL resistance in Mel-2a, SK-Mel-103, A-375-TS, and Mel-HO-TS. At 24 hours, 16-35% apoptosis induction is obtained[3].
Solvent&Solubility	***In Vitro:*** **DMSO： ≥ 34 mg/mL (97.76 mM)** * "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.8752 mL	14.3761 mL	28.7522 mL
	5 mM	0.5750 mL	2.8752 mL	5.7504 mL
	10 mM	0.2875 mL	1.4376 mL	2.8752 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]. Takle AK, et al. The identification of potent, selective and CNS penetrant furan-based inhibitors of B-Raf kinase. Bioorg Med Chem Lett. 2008 Aug 1;18(15):4373-6. [2]. Shelton JG, et al. Differential effects of kinase cascade inhibitors on neoplastic and cytokine-mediated cell proliferation. Leukemia. 2003 Sep;17(9):1765-82. [3]. Berger A, et al. RAF inhibition overcomes resistance to TRAIL-induced apoptosis in melanoma cells. J Invest Dermatol. 2014 Feb;134(2):430-440.

实验参考：

Cell Assay	For induction of apoptosis, TRAIL (20 ng/mL), the pan-RAF inhibitor L-779450 (0.1-50 μM), the MEK inhibitor U0126 (20 μM), and the selective BRAF(V600E) inhibitor Vemurafenib/PLX4032 are used. For continuous monitoring cell growth, the xCELLigence system is applied. Relative cell indices correspond to attached cell numbers. Cell cycle analyses are performed for quantification of apoptosis and cell cycle

	arrest. Cells harvested by trypsinization are stained for 1 hour with propidium iodide (200 mg/mL), and sub-G1 fractions, corresponding to cells with fragmented DNA, are quantified by flow cytometry[3].
References	[1]. Takle AK, et al. The identification of potent, selective and CNS penetrant furan-based inhibitors of B-Raf kinase. Bioorg Med Chem Lett. 2008 Aug 1;18(15):4373-6. [2]. Shelton JG, et al. Differential effects of kinase cascade inhibitors on neoplastic and cytokine-mediated cell proliferation. Leukemia. 2003 Sep;17(9):1765-82. [3]. Berger A, et al. RAF inhibition overcomes resistance to TRAIL-induced apoptosis in melanoma cells. J Invest Dermatol. 2014 Feb;134(2):430-440.