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产品名称: **ML-18**  
产品别名: **ML-18**

生物活性:					
Description	ML-18 is a non-peptide bombesin receptor subtype-3 (BRS-3) antagonist with an IC <sub>50</sub> of 4.8 μM.				
IC <sub>50</sub> & Target	IC50: 4.8 μM (BRS-3)[1]				
In Vitro	ML-18 inhibits specific <sup>125</sup> I-BA1 (DTyr-Gln-Trp-Ala-Val-βAla-His-Phe-Nle-NH2)BB6-14 binding to NCI-H1299 lung cancer cells stably transfected with BRS-3 with IC <sub>50</sub> values of 4.8 μM. ML-18 binds with lower affinity to the GRPR and NMBR with IC <sub>50</sub> values of 16 and more than 100 μM, respectively. ML-18 at 16 μM inhibits the ability of 10 nM BA1 to elevate cytosolic Ca <sup>2+</sup> in a reversible manner using lung cancer cells loaded with FURA2-AM. ML-18 at 16 μM inhibits the ability of 100 nM BA1 to cause tyrosine phosphorylation of the EGFR and ERK in lung cancer cells. It inhibits the proliferation of lung cancer cells[1].				
Solvent&Solubility	<b>In Vitro:</b> <b>DMSO : ≥ 100 mg/mL (175.55 mM)</b>  * "≥" means soluble, but saturation unknown.				
	Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
		1 mM	1.7555 mL	8.7773 mL	17.5546 mL
		5 mM	0.3511 mL	1.7555 mL	3.5109 mL
		10 mM	0.1755 mL	0.8777 mL	1.7555 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。				
	References	[1]. Moody TW, et al. ML-18 is a non-peptide bombesin receptor subtype-3 antagonist which inhibits lung cancer growth. Peptides. 2015 Feb;64:55-61.			
实验参考:					
Cell Assay	Cell viability is measured using the MTT assay. NCI-H727 or NCI-H1299 cells transfected with BRS-3 are treated with ML-18 (0, 4.8, 16, 48 μM) or gefitinib added. After 2 days, 15 μL of 0.1 % MTT solution added. After 4 h, 150 μL of DMSO is added. After 16 h, the optical density at 570 nm is determined <sup>[1]</sup> .				
Kinase Assay	The cells are incubated in SIT buffer containing 0.25% bovine serum albumin and 250 μg/mL bacitracin and <sup>125</sup> I-BA1 (100,000 cpm) is added, as well as various concentrations of unlabelled competitor (ML-18). After incubation at 37℃ for 30 min, free <sup>125</sup> I-BA1 is removed by washing 3 times in buffer and the cells which contain bound <sup>125</sup> I-BA1 is dissolved in 0.2 N NaOH and counted in a gamma counter. The IC <sub>50</sub> is calculated for each unlabeled competitor <sup>[1]</sup> .				
References	[1]. Moody TW, et al. ML-18 is a non-peptide bombesin receptor subtype-3 antagonist which inhibits lung cancer growth. Peptides. 2015 Feb;64:55-61.				