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产品名称：Y16
产品别名：Y16

生物活性：

Description	Y16 is a specific inhibitor of Leukemia-associated Rho guanine nucleotide exchange factor (LARG) with a $K_d$value of 76 nM. Y16 is active in blocking the interaction of LARG and related G-protein-coupled Rho GEFs with RhoA. Y16 shows no detectable effect on other diffuse B-cell lymphoma (Dbl) family Rho GEFs, Rho effectors, or a RhoGAP[1].
IC_{50} & Target	Kd: 76 nM (LARG)[1]
In Vitro	Y16 (10-30 μM; 24 hours; NIH 3T3 cells) could inhibit RhoA-GTP formation induced by serum dose dependently and is specific for RhoA[1]. Y16 (10-30 μM; 24 hours; NIH 3T3 cells) efficiently inhibits serum or SDF-1α-induced phospho-MLC and phospho-FAK formation, which are downstream of RhoA[1].

Cell Viability Assay[1]

Cell Line:	NIH 3T3 cells
Concentration:	10 μM, 30 μM
Incubation Time:	24 hours
Result:	Inhibited RhoA-GTP formation induced by serum dose dependently and was specific for RhoA.

Western Blot Analysis[1]

Cell Line:	NIH 3T3 cells
Concentration:	10 μM, 30 μM
Incubation Time:	24 hours
Result:	Inhibited serum or SDF-1α-induced phospho-MLC and phospho-FAK formation, which were downstream of RhoA.

Solvent&Solubility

In Vitro:

DMSO : 25 mg/mL (**65.03 mM;** Need ultrasonic)

H_2O : < 0.1 mg/mL (insoluble)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.6013 mL	13.0063 mL	26.0125 mL
	5 mM	0.5203 mL	2.6013 mL	5.2025 mL
	10 mM	0.2601 mL	1.3006 mL	2.6013 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。

In Vivo:

请根据您的实验动物和给药方式选择适当的溶解方案。以下溶解方案都请先按照 In Vitro 方式配制澄清的储备液，再依次添加助溶剂：

——为保证实验结果的可靠性，澄清的储备液可以根据储存条件，适当保存；体内实验的工作液，建议您现

	用现配，当天使用； 以下溶剂前显示的百分比是指该溶剂在您配制终溶液中的体积占比；如在配制过程中出现沉淀、析出现象，可以通过加热和/或超声的方式助溶 1.请依序添加每种溶剂： 10% DMSO→40% PEG300 →5% Tween-80 → 45% saline Solubility: 2.5 mg/mL (6.50 mM); Suspended solution; Need ultrasonic 此方案可获得 2.5 mg/mL (6.50 mM)的均匀悬浊液，悬浊液可用于口服和腹腔注射。 以 1 mL 工作液为例，取 100 μL 25.0 mg/mL 的澄清 DMSO 储备液加到 400 μL PEG300 中，混合均匀；向上述体系中加入 50 μL Tween-80，混合均匀；然后继续加入 450 μL 生理盐水定容至 1 mL。 2.请依序添加每种溶剂： 10% DMSO →90% corn oil Solubility: ≥ 2.5 mg/mL (6.50 mM); Clear solution 此方案可获得 ≥ 2.5 mg/mL (6.50 mM，饱和度未知) 的澄清溶液，此方案不适用于实验周期在半个月以上的实验。 以 1 mL 工作液为例，取 100 μL 25.0 mg/mL 的澄清 DMSO 储备液加到 900 μL 玉米油中，混合均匀。
References	[1]. Shang X, et al. Small-molecule inhibitors targeting G-protein-coupled Rho guanine nucleotide exchange factors. Proc Natl Acad Sci U S A. 2013 Feb 19;110(8):3155-60.