产品名称：**BMS-833923**
产品别名：**XL-139**

生物活性：

Description

BMS-833923 (XL-139) is an orally bioavailable small-molecule inhibitor of Smoothened with potential antineoplastic activity; inhibits BODIPY cyclopamine binding to SMO in a dose-dependent manner with an IC50 of 21 nM. IC50 Value: 6-35 nM [1] Target: Smoothened SMO antagonist BMS-833923 inhibits the sonic hedgehog (SHH) pathway protein SMO, which may result in a suppression of the SHH signaling pathway. in vitro: In vitro, BMS-833923 inhibits the expression of downstream effectors in the HH pathway (GLI1 and PTCH1) in cell lines that express wild-type SMO and those which express activated mutant forms of SMO (IC50values of 6-35 nM). In FACS-based binding assays, BMS-833923 inhibits BODIPY cyclopamine binding to SMO in a dose-dependent manner with an IC50 of 21 nM [1]. in vivo: Pharmacodynamic studies show that BMS-833923 robustly inhibits HH pathway activity with along duration of action after a single oral dose in medulloblastoma and pancreatic carcinoma xenograft models. The pharmacodynamic effects of BMS-833923 observed in these models translate into tumor growth inhibition at well-tolerated doses [1]. Clinical trial: Dasatinib Combo With Smoothened (SMO) Antagonist (BMS-833923). Phase 2

Solvent&Solubility

In Vitro:

DMSO : 50 mg/mL (**105.58 mM;** Need ultrasonic)

	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	2.1116 mL	10.5581 mL	21.1162 mL
	5 mM	0.4223 mL	2.1116 mL	4.2232 mL
	10 mM	0.2112 mL	1.0558 mL	2.1116 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 (5.28 mM); Clear solution

此方案可获得 ≥ 2.5 mg/mL (5.28 mM，饱和度未知) 的澄清溶液。

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。

References

[1]. Steven B, et al. Abstract B192: Preclinical characterization of BMS-833923 (XL139), a hedgehog (HH) pathway inhibitor in early clinical development. Molecular Cancer Therapeutics: December 2009; Volume 8, Issue 12, Supplement 1.