

产品名称: OSI-930

产品别名: OSI-930

## 生物活性:

### Description

OSI-930 is a potent inhibitor of Kit, KDR and CSF-1R with IC50 of 80 nM, 9 nM and 15 nM, respectively; also potent to Flt-1, c-Raf and Lck and low activity against PDGFR $\alpha/\beta$ , Flt-3 and Abl. IC50 value: 9 nM(VEGFR2); 15 nM(CSF1R); 80 nM (Kit activated) [1] Target: VEGFR2/Kit/CSF1R in vitro: OSI-930 inhibits the cell proliferation in the HMC-1 cell line with IC50 of 14 nM without significant effect on growth of the COLO-205 cell line that does not express a constitutively active mutant receptor tyrosine kinase. Moreover, OSI-930 also induces apoptosis in HMC-1 cell line with EC50 of 34 nM [1]. A recent study shows that OSI-930 inactivates purified, recombinant cytochrome P450 (P450) 3A4 with a Ki of 24  $\mu$ M in a time- and concentration-dependent mode [2]. in vivo: OSI-930, administrated at the maximally efficacious dose of 200 mg/kg by oral gavage, exhibits potent antitumor activity in a broad range of preclinical xenograft models including HMC-1, NCI-SNU-5, COLO-205 and U251 xenograft models [1].

### Solvent&Solubility

#### *In Vitro:*

DMSO : 50 mg/mL (112.75 mM; Need ultrasonic)

H<sub>2</sub>O : < 0.1 mg/mL (insoluble)

Preparing  Stock Solutions	Solvent \ Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.2551 mL	11.2755 mL	22.5510 mL
	5 mM	0.4510 mL	2.2551 mL	4.5102 mL
	10 mM	0.2255 mL	1.1275 mL	2.2551 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。

#### *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:  $\geq$  2.5 mg/mL (5.64 mM); Clear solution

此方案可获得  $\geq$  2.5 mg/mL (5.64 mM，饱和度未知) 的澄清溶液。

以 1 mL 工作液为例，取 100  $\mu$ L 25.0 mg/mL 的澄清 DMSO 储备液加到 400  $\mu$ L PEG300 中，混合均匀；向上述体系中加入 50  $\mu$ L Tween-80，混合均匀；然后继续加入 450  $\mu$ L 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:  $\geq$  2.5 mg/mL (5.64 mM); Clear solution

此方案可获得  $\geq$  2.5 mg/mL (5.64 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  $\mu$ L 25.0 mg/mL 的澄清 DMSO 储备液加到 900  $\mu$ L 玉米油中，混合均匀。

## References

- [1]. Garton AJ, et al. OSI-930: a novel selective inhibitor of Kit and kinase insert domain receptor tyrosine kinases with antitumor activity in mouse xenograft models. *Cancer Res.* 2006, 66(2):1015-1024.
- [2]. Lin HL, et al. Inactivation of cytochrome P450 (P450) 3A4 but not P450 3A5 by OSI-930, a thiophene-containing anticancer drug. *Drug Metab Dispos.* 2011, 39(2), 345-350.



源叶生物