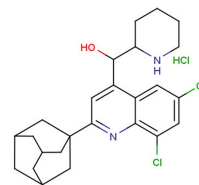


NSC305787 hydrochloride

**Chemical Properties**

CAS No.:	53868-26-1
Formula:	C25H31Cl3N2O
Molecular Weight:	481.89
Appearance:	N/A
Storage:	0-4°C for short term (days to weeks), or -20°C for long term (months).

**Biological Description**

Description	NSC305787 hydrochloride is an inhibitor of ezrin (Kd: 5.85 $\mu$ M). NSC305787 hydrochloride inhibits the phosphorylation of ezrin caused by PKC $\alpha$ (IC <sub>50</sub> : 8.3 $\mu$ M). It has an antitumor activity.
Targets(IC <sub>50</sub> )	ezrin: 8.3 $\mu$ M(kd)
In vitro	NSC305787 binds to PKC $\alpha$ with a Kd value of 172.4 $\mu$ M, and inhibits ezrin T567 phosphorylation primarily via its binding to ezrin and not through inhibition of PKC $\alpha$ kinase activity. NSC305787 inhibits PKC $\alpha$ phosphorylation of Ezrin, Moesin, Radixin, MBP (IC <sub>50</sub> s: 8.3, 9.4, 55, 58.9 $\mu$ M, respectively). NSC305787 (10 $\mu$ M) decreases cell motility phenotypes in zebrafish and blocks OS metastatic growth in lung organ culture. NSC305787 (1, 10 $\mu$ M) displays inhibitory activity against the ezrin-mediated invasion of K7M2 osteosarcoma (OS) cells [1].
In vivo	In a transgenic mouse model of osteosarcoma (Osx-Cre+p53fl/flpRBfl/fl), NSC305787 (240 $\mu$ g/kg, i.p.) dramatically inhibits pulmonary metastasis and shows a more favorable pharmacokinetic profile compared with NSC668394 in the mouse model. NSC305787 (0.240 mg/kg/day, i.p.) inhibits ezrin-dependent osteosarcoma metastatic growth in mouse lung[1][2].

**Solubility Information**

Solubility	DMSO: 8 mg/mL (16.60 mM) (< 1 mg/ml refers to the product slightly soluble or insoluble)
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## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.075 mL	10.376 mL	20.752 mL
5 mM	0.415 mL	2.075 mL	4.15 mL
10 mM	0.208 mL	1.038 mL	2.075 mL
50 mM	0.042 mL	0.208 mL	0.415 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 °C for 6 months; - 20 °C for 1 month. Please use it as soon as possible.

Reference

1. Bulut G, et al. Small molecule inhibitors of ezrin inhibit the invasive phenotype of osteosarcoma cells. *Oncogene*. 2012 Jan 19;31(3):269-81.
2. Çelik H, et al. Ezrin Inhibition Up-regulates Stress Response Gene Expression. *J Biol Chem*. 2016 Jun 17;291(25):13257-70.

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