上海源叶生物科技有限公司
Shanghai yuanye Bio-Technology Co., Ltd
电话：021-61312973　　传真：021-55068248
网址：www.shyuanye.com
邮箱：shyysw@sina.com

产品名称：EDO-S101
产品别名：Tinostamustine

生物活性：

Description	EDO-S101 is a pan HDAC inhibitor; inhibits HDAC1, HDAC2 and HDAC3 with IC50 values of 9, 9 and 25 nM, respectively.

IC_{50} & Target	HDAC6	HDAC1	HDAC2	HDAC3	HDAC10	HDAC8
	6 nM (IC_{50})	9 nM (IC_{50})	9 nM (IC_{50})	25 nM (IC_{50})	72 nM (IC_{50})	107 nM (IC_{50})

In Vitro	EDOS101 inhibits HDAC activity in rat peripheral blood mononuclear cells (PBMCs) in a cellular assay by approximately 90% one hour after dosing with 10mg/kg i.v. HDAC inhibition in PBMCs could not be increased with higher doses up to 50mg/kg. EDO-S101 triggers apoptosis and shows strong antitumor activity in HL60 and Daudi cells. Initial in vitro experiments in HL60 cells shows an activation of the intrinsic pathway of apoptosis with cleavage of caspases 3, 9 and PARP and a marked reduction of anti-apoptotic proteins XIAP and Mcl-1[1].
In Vivo	Intracellular HDAC inhibition of EDO-S101, which occurs rapidly after dosing is at maximum activity already at the lowest dose of 10mg/kg and lasts for about 12-16 hours. Exposure to EDO-S101 causes a strong DNA repair response evidenced by activation of pH2AX and p53 in tumors taken from mice bearing subcutaneous human Burkitt's lymphoma. Tumors of BL rapidly shrink or are completely eradicated after i.v. administration of EDO-S101[1]

Solvent&Solubility

In Vitro:

DMSO : ≥ 30 mg/mL (72.23 mM)

* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent / Mass / Concentration	**1 mg**	**5 mg**	**10 mg**
	1 mM	2.4076 mL	12.0378 mL	24.0755 mL
	5 mM	0.4815 mL	2.4076 mL	4.8151 mL
	10 mM	0.2408 mL	1.2038 mL	2.4076 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。

References	[1]. Mehrling T, et al. The Alkylating-HDAC Inhibition Fusion Principle: Taking Chemotherapy to the Next Level with the First in Class Molecule EDO-S101. Anticancer Agents Med Chem. 2016;16(1):20-8.

实验参考：

Animal Administration	Rats: The duration of HDAC inhibition is assessed in 12 female rats after receiving a single dose of either vehicle or EDO-S101 (25mg/kg). Blood samples from EDO-S101 treated rats are collected 1hr, 3hr, 6hr, 16hr and 24hr post dosing (n=2 per time point). Blood sample from vehicle treated rats (n=2) are collected 24hr post dosing[1].
	EDO-S101 is dissolved in DMSO and added to the assay buffer solution. EDO-S101 dilutions of 5 µL of each dilution is added to 50 µL of the reaction mixture including the Fluor de Lys substrate and

Kinase Assay	all of the enzymatic reactions are conducted in duplicate at 37°C for 30 minutes. After enzymatic reactions, 50 µL of 2xHDAC developer is added to each well and fluorescence intensity is measured[1].
References	[1]. Mehrling T, et al. The Alkylating-HDAC Inhibition Fusion Principle: Taking Chemotherapy to the Next Level with the First in Class Molecule EDO-S101. Anticancer Agents Med Chem. 2016;16(1):20-8.