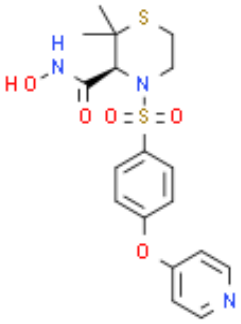
Product Data Sheet

Cas No.:	192329-42-3	Cat. No:	PL07405
Product Name:	Prinomastat		
Product synonym:	普马司他;(S)-2-[(羟基氨基)甲基]-5,6-二甲基-4-(4-吡啶-4-基氧苯基)磺酰基吗啉-3-硫酮;普啉司他		
Chemical name:	Prinomastat		
MF:	C18H21N3O5S2	FW:	423.50644
Purity:	≥98%	Batch No.:	-
Storage:			
Structural formula:			
λmax:	-	Formulation:	-
Solubility :			
SMILES :	O=C([C@@H]1N(S(=O)(C2=CC=C(OC3=CC=NC=C3)C=C2)=O)CCSC1(C)C)NO		
InChI Code:	-		
InChI Key:			
WARNING This product is not for human or veterinary use.			

Product Description

Prinomastat (AG3340) 是一种广谱，有效的口服活性金属蛋白酶 (MMP) 抑制剂，对于 MMP-1, MMP-3 和 MMP-9 的 IC_{50} 分别为 79 nM，6.3 nM 和 5.0 nM。Prinomastat 抑制 MMP-2, MMP-3 和 MMP-9 的 K_i 分别为 0.05 nM，0.3 nM 和 0.26 nM。Prinomastat 穿过血脑屏障。抗肿瘤活性。

生物活性	Prinomastat (AG3340) is a broad spectrum, potent, orally active metalloproteinase (MMP) inhibitor with IC 50 s of 79, 6.3 and 5.0 nM for MMP-1, MMP-3 and MMP-9, respectively. Prinomastat inhibits MMP-2, MMP-3 and MMP-9 with K i s of 0.05 nM, 0.3 nM and 0.26 nM, respectively. Prinomastat crosses blood-brain barrier. Antitumor avtivity.
IC50 & Target[1][2]	MMP-9 5 nM (IC50) MMP-9 0.26 nM (Ki)

体外研究(In Vitro)	Prinomastat (AG3340; 0.1-1 μg/mL; 4 days; C57MG/Wnt1 cells) inhibits Wnt1-induced MMP-3 production. Reversal of Wnt1-induced EMT and β-catenin transcriptional activity by Prinomastat. Co-culture of L/Wnt3a cells and CT7 cells increases the Topflash activity in CT7 cells, and co-culturing both L/Wnt3a cells and MMP-3 overexpressing C57MG cells with CT7 cells increases the Topflash luciferase activity in CT7 cells beyond the level observed with L/Wnt3a cells, and these effects are all suppressed by Prinomastat (AG3340). Inhibition of entry of C57MG/Wnt1 cells into S phase by Prinomastat corresponds to a decrease in expression of cyclin D1 and Erk1/2 phosphorylation. The effect of Prinomastat on Wnt1-induced migration is then examined using an in vitro wound assay. As anticipated, the migration of C57MG/Wnt1 cells is increased by 1.8-fold when compared with C57MG cells.
体内研究(In Vivo)	In a human fibrosarcoma mouse model (HT1080), the mice are treated therapeutically for 14-16 days with 50 mg/kg/day ip daily starting day 3 to 6 after tumour inoculation. Prinomastat is well tolerated by the animals, and there are no signs of weight loss or other adverse effects. Prinomastat has good tumour growth inhibition, with a short T 1/2 of 1.6 hours. has not independently confirmed the accuracy of these methods. They are for reference only.
包装储存	Powder -20°C 3 years； 4°C 2 years
溶解度数据	In Vitro: DMSO : < 1 mg/mL (ultrasonic;warming;heat to 60°C) (insoluble or slightly soluble)