

Product Data Sheet

Cas No.:	167305-00-2	Cat. No:	PL14786	
Product Name:	Omapatrilat			
Product synonym:	奥马曲拉			
Chemical name:	Omapatrilat			
MF:	C19H24N2O4S2	FW:	408.53486	
Purity:	≥99%	Batch No.:	-	
Storage:				
Structural formula:	SH O N S S S S S S S S S S S S S S S S S S			
λmax:	-	Formulation:	-	
Solubility :				
SMILES :	O=C([C@@H]1CCC[C@](N21)([H])SCC[C@H](NC([C@@H](S)CC3=CC=CC=C3)=O)C2=O)O			
InChl Code:		-		
InChl Key:				
WARNING This product is not for human or veterinary use.				

Product Description

Omapatrilat是金属蛋白酶ACE和NEP的双重抑制剂,Ki值分别为0.64和0.45 nM。

生物活性	Omapatrilat is a dual inhibitor of the metalloproteases ACE and NEP with K i values of 0.64 and 0.45 nM, respectively.
IC50 & Target[1][2]	Ki: 0.45 nM (NEP), 0.64 nM (ACE); IC50: 8 nM (NEP), 5 nM (ACE)
体外研究(In Vitro)	Omapatrilat exhibits high potency for NEP, NEP2 and ACE, moderate strong activity against APP, but low activity against ECE1 (Ki=0.45, 25, 0.64, 250 nM). In vitro autoradiography using the specific NEP inhibitor radioligand 125I-RB104 and the specific ACE inhibitor radioligand 125I-MK351A show omapatril at (10 mg/kg) causes rapid and potent inhibition of renal NEP and ACE, respectively, for 24 h. has not independently confirmed the accuracy of these methods. They are for reference only.

体内研究(In Vivo)	Omapatrilat demonstrates excellent blood pressure lowering in a variety of animal models characterized by various levels of plasma renin activity and significantly potentiates urinary sodium, ANP, and cGMP excretion in a cynomolgus monkey assay. Omapatrilat decreases mean arterial pressure (MAP) approximately 40 mmHg below baseline from 10 to 24 h. Oral administration of omapatrilat at 100 μ M/kg once daily results in a 38 mmHg decrease in systolic blood pressure at day three as compared to vehicle . Omapatrilat is widely used in experimental protocols related to hypertension and heart failure. Chronic oral administration of omapatrilat reduces aortic leakiness and atheroma formation with enhanced endothelial independent vasorelaxation to ANP. Omapatrilat causes significant inhibition of plasma ACE and increased plasma renin activity in rats.	
包装储存	-20°C, protect from light, stored under nitrogen In solvent : -80°C, 6 months; -20°C, 1 month (protect from light, stored under nitrogen)	
溶解度数据	In Vitro: DMSO : ≥ 31 mg/mL (75.88 mM)配制储备液	