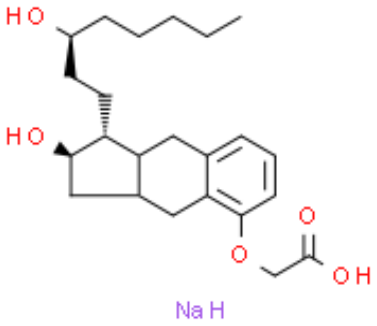
Product Data Sheet

Cas No.:	289480-64-4	Cat. No:	PL10116
Product Name:	Treprostinil sodium		
Product synonym:	曲前列尼尔钠;曲前列素;曲前列尼尔钠289480-64-4,工厂零售289480-64-4;曲列前素;曲前列尼尔钠9(瑞莫杜林) 1G;曲前列尼尔钠9(瑞莫杜林);曲前列尼尔酸;曲前列环素钠盐		
Chemical name:	Treprostinil sodium		
MF:	C23H33NAO5	FW:	412.49
Purity:	≥98%	Batch No.:	-
Storage:			
Structural formula:			
λmax:	-	Formulation:	-
Solubility :			
SMILES :	[Na+].O([H])C1([H])C([H])([H])[C@]2([H])C([H])([H])C3C(=C([H])C([H])=C([H])C=3C([H])([H])[C@@]2([H])C1([H])C([H])([H])C([H])([H])C([H])(C([H])([H])C([H])([H])C([H])([H])C([H])([H])C([H])([H])C([H])([H])[H])O[H])OC([H])([H])C(=O)[O-]		
InChI Code:	-		
InChI Key:			

WARNING This product is not for human or veterinary use.

Product Description

Treprostinil (UT-15) sodium 是高效的DP1和EP2激动剂，其EC_{50}值分别为0.6±0.1和6.2±1.2 nM。

生物活性	Treprostinil (UT-15) sodium is a potent DP1 and EP2 agonist with EC 50 values of 0.6±0.1 and 6.2±1.2 nM, respectively.
IC50 & Target[1][2]	IP Receptor 1.9 nM (EC50) TP Receptor 919
体外研究(In Vitro)	Treprostinil sodium has high affinity for the DP1, EP2 and IP receptors (Ki=4.4, 3.6 and 32 nM, respectively), low affinity for EP1 and EP4 receptors and even lower affinity for EP3, FP and TP receptors. Activation of IP, DP1 and EP2 receptors, as with treprostinil, can all result in vasodilatation of human pulmonary arteries.Treprostinil sodium inhibits viability of cultured endothelial colony forming cells. Endothelial colony forming cells proliferation is stimulated by conditioned media from Treprostinil pretreated mesenchymal stem cells. has not independently confirmed the accuracy of these methods. They are for reference only.

体内研究(In Vivo)	Inhaled treprostinil sodium, a prostacyclin analog, is the most recent agent to receive FDA approval for the treatment of a fatal orphan disease: pulmonary arterial hypertension (PAH). Treprostinil preserves the sinusoidal endothelial cell lining and reduces platelet deposition early post-transplantation compared to placebo. Hepatic tissue blood flow is significantly compromised in the placebo group, whereas treprostinil maintains blood flow similar to normal levels.Treprostinil treatment significantly increases the vessel-forming ability of endothelial colony forming cells combined with mesenchymal stem cells in Matrigel implanted in nude mice. Silencing VEGF-A gene in mesenchymal stem cells also blocks the pro-angiogenic effect of Treprostinil. Treprostinil is most efficacious in raising intracellular cAMP levels in murine and human hematopoietic stem and progenitor cells. T
包装储存	4°C, sealed storage, away from moistur In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)
溶解度数据	In Vitro: DMSO : ≥ 26 mg/mL (63.03 mM)H_2O : 16.67 mg/mL (40.41 mM; Need ultrasonic)