

Product Data Sheet

Cas No.:	862281-92-3	Cat. No:	PL07073	
Product Name:	PF-00446687			
Product synonym:		-		
Chemical name:		PF-00446687		
MF:	C28H36N2O2F2	FW:	470.59444	
Purity:	≥99%	Batch No.:	-	
Storage:		•		
Structural formula:				
λmax:	-	Formulation:	-	
Solubility :				
SMILES :	 О=С([С@Н]1[С@Н](С2=С(С=С(F)С=С2	 2)F)CN(C(C)(C)C)C1)N3C[C@H]([C	@](O)(C4=CC=CC=C4)[C@@H](C)C3)C	
InChl Code:		-		
InChl Key:				
WARNING This product is not for human or veterinary use.				

Product Description

PF-00446687 是一种有效的,脑渗透性的,选择性黑皮质素 4 受体 (MC4R) 激动剂, EC50 为 12 ± 1 nM。

生物活性	PF-00446687 is a potent, selective melanocortin-4 receptor (MC4R) agonist with EC50 of 12?±?1 nM. Pf-446687 is brain penetrant.
IC50 & Target[1][2]	EC50: 12?±?1 nM (MC4R)
体外研究(In Vitro)	PF-00446687 binds MC4 receptor with a Ki of 27±4 nM. PF-00446687 has a relatively weak activity at the MC1, MC3, and MC5 receptors with EC50s of $1.02\pm0.30 \mu$ M, $1.16\pm0.35 \mu$ M, and $1.98\pm0.20 \mu$ M, respectively. The broad off-target profiles of PF-00446687 are assessed in the CEREP Bioprint wide ligand screening panel, with the most potent binding activities being at the σ receptor (Ki=330 nM), the sodium ion channel (Ki=690 nM), and the muscarinic M2 receptor (Ki=730 nM). has not independently confirmed the accuracy of these methods. They are for reference only.
体内研究(In Vivo)	Pf-446687 is highly selective for MC4R and is both brain penetrant and stable in vivo. Peripheral administration of the brain penetrant MC3/4R receptor peptide agonist, Melanotan II (MTII), and the highly selective, small molecule MC4R agonist, Pf-446687, enhances partner preference formation in the prairie vole, but not in the non-monogamous meadow vole. 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 : 62.5 mg/mL (132.81 mM; Need ultrasonic)配制储备液