

## **Product Data Sheet**

Cas No.:	1219739-36-2	Cat. No:	PL02101
Product Name:	EX229		
Product synonym:	-		
Chemical name:	EX229		
MF:	C24H18CLN3O3	FW:	431.8710
Purity:	≥98%	Batch No.:	-
Storage:			
Structural formula:			
λmax:	-	Formulation:	-
Solubility :			
SMILES :	CIC1=C([H])C2=C(C([H])=C1C1C([H])=C([H])C3=C(C([H])=C([H])N3C([H])([H])[H])C=1[H])N=C(N2[H])OC1C([H])=C([H])C(C([H])([H])[H]) )=C(C(=O)O[H])C=1[H]		
InChl Code:		-	
InChl Key:			
WARNING This product is not for human or veterinary use.			

## **Product Description**

EX229 是一个苯并咪唑的衍生物,是 AMP 活化蛋白激酶 (AMPK) 的有效变构激动剂,其对 α1β1γ1、α2β1γ1 和 α1β2γ1 的 K<sub>d</sub> 值分别为 0.06 μM、0.06 μM 和 0.51 μM。

生物活性	EX229, a Benzimidazole derivative, is a potent and allosteric activator of AMP-activated protein kinase (AMPK), with K d s of 0.06 $\mu$ M, 0.06 $\mu$ M and 0.51 $\mu$ M for $\alpha$ 1 $\beta$ 1 $\gamma$ 1, $\alpha$ 2 $\beta$ 1 $\gamma$ 1 and $\alpha$ 1 $\beta$ 2 $\gamma$ 1 in biolayer interferometry, respectively.
IC50 & Target[1][2] AMPK α1β1γ1 0.06 μM (Kd) AMPK α2β1γ1 0.06 μM (Kd)p	

体外研究(In Vitro)	EX229 is a potent and allosteric activator of AMP-activated protein kinase (AMPK), with Kds of 0.06 $\mu$ M, 0.06 $\mu$ M and 0.51 $\mu$ M for $\alpha 1\beta 1\gamma 1$ , $\alpha 2\beta 1\gamma 1$ and $\alpha 1\beta 2\gamma 1$ , respectively Treatment of hepatocytes with EX229 (991) alone results in a slight increase in the phosphorylation of AMPK and RAPTOR only at 0.3 $\mu$ M, whereas a robust increase in ACC phosphorylation is readily observed and saturated at a concentration of 0.03 $\mu$ M EX229. AICAR or C13 alone robustly increases T172 phosphorylation of AMPK $\alpha$ , and when 991 is coincubated, there is a modest additional dose-dependent increase in AMPK $\alpha$ phosphorylation. RAPTOR phosphorylation is modestly increased by AICAR or C13 alone, and it is dose dependently increased when coincubations are carried out with EX229. EX229 also dose dependently (0.01 and 0.1 $\mu$ M) inhibits lipogenesis (34% and 63%, respectively), which is further reduced whe	
包装储存	Powder -20°C 3 years; 4°C 2 years	
溶解度数据	In Vitro: DMSO : 13 mg/mL (30.10 mM; Need ultrasonic and warming)配制储备液	