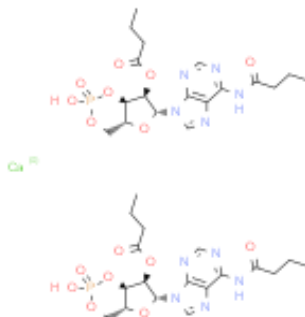


## Product Data Sheet

Cas No.:	938448-87-4	Cat. No:	PL09717
Product Name:	Bucladesine calcium		
Product synonym:	二丁酰环磷腺苷钙;N-(1-氧代丁基)-腺苷环 3',5'-(磷酸氢酯) 2'-丁酸酯钙盐 (2:1);Bucladesine (calcium salt)		
Chemical name:	Bucladesine calcium		
MF:	C18H24CAN5O8P	FW:	509.463624000549
Purity:	≥99%	Batch No.:	-
Storage:			
Structural formula:			
λmax:	-	Formulation:	-
Solubility :			
SMILES :	O([C@@H]1[C@@H]2OP(OC[C@H]2O[C@H]1N1C=NC2C(=NC=NC1=2)NC(=O)CCC)(O=O)C(=O)CCC.[Ca]		
InChI Code:	-		
InChI Key:			
WARNING This product is not for human or veterinary use.			

## Product Description

Bucladesine calcium salt (Dibutyryl-cAMP calcium salt;DC2797 calcium salt) 是可渗透细胞的 cAMP 类似物，可通过增加细胞内 cAMP 水平，选择性激活 cAMP 依赖性蛋白激酶(PKA)。Bucladesine calcium salt 也有磷酸二酯酶 (PDE) 抑制剂的作用。

生物活性	Bucladesine calcium salt (Dibutyryl-cAMP calcium salt;DC2797 calcium salt) is a cell-permeable cyclic AMP (cAMP) analog and selectively activates cAMP dependent protein kinase (PKA) by increasing the intracellular level of cAMP. Bucladesine calcium salt acts as a phosphodiesterase (PDE) inhibitor.
IC50 & Target[1][2]	PKA PDE

体内研究(In Vivo)	<p>Bucladesine (bilateral infusion of 10 mM or 100 mM) leads to a significant reduction in escape latency and travel distance (showing an improvement in spatial memory) compared to the control, as assessed by Morris water maze task in male rats.</p> <p>Bucladesine at 1 mM and 5 mM concentrations infused within minutes after 0.5 mg nicotine infusion improves spatial memory retention in male rats.</p> <p>Bucladesine (10 mM/side) combined with Nicotine (0.5 mM/side) results in a significant increase in the ChAT and VAcHt immunoreactivity in CA1 regions, and increase in the optical density and amount of ChAT and VAcHt immunostaining correlates with the decrease in escape latency and traveled distance in rats treated with Nicotine and low dose of Bucladesine.</p> <p>Bucladesine is absorbed very rapidly and almost completely when the aqueous solution is applied to the site where the skin has been</p>
包装储存	4°C, sealed storage, away from moisture In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)
溶解度数据	In Vitro: H <sub>2</sub> O : 100 mg/mL (204.74 mM; Need ultrasonic)DMSO : ≥ 100 mg/mL (204.74 mM)