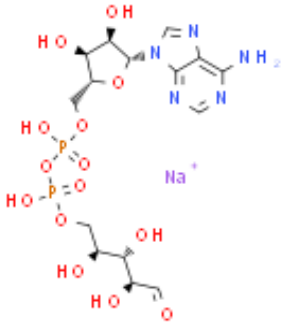
Product Data Sheet

Cas No.:	68414-18-6	Cat. No:	PL11826
Product Name:	Adenosine 5′-diphosphoribose sodium		
Product synonym:	腺苷5'-二磷酸核糖钠;腺苷5′-二磷酸核糖钠;腺苷5''-二磷酸核糖钠;腺苷5-二磷酸核糖钠;腺苷 5'-二磷酸核糖钠;二磷酸腺苷核糖		
Chemical name:	Adenosine 5′-diphosphoribose sodium		
MF:	C15H23N5O14P2.NA	FW:	582.30562
Purity:	≥99%	Batch No.:	-
Storage:			
Structural formula:			
λmax：	-	Formulation：	-
Solubility :			
SMILES :	[Na+].O=C[C@H]([C@H]([C@H](COP(OP(OC[C@H]1O[C@@H](N2C=NC3=C(N=CN=C23)N)[C@H](O)[C@@H]1O)(O)=O)(O)=O)O)O)O		
InChI Code:	-		
InChI Key:			
WARNING This product is not for human or veterinary use.			

Product Description

Adenosine 5′-diphosphoribose sodium (ADP ribose sodium) 是一种烟酰胺腺嘌呤核苷酸 (NAD^+) 的代谢产物，也是一种最有效和最主要的细胞内 Ca^{2+} 渗透性阳离子 TRPM2 通道激活剂，还可以增强自噬 (autophagy)。

生物活性	Adenosine 5′-diphosphoribose sodium (ADP ribose sodium) is a nicotinamide adenine nucleotide (NAD) metabolite. Adenosine 5′-diphosphoribose sodium is the most potent and primary intracellular Ca-permeable cation TRPM2 channel activator. Adenosine 5′-diphosphoribose sodium also can enhance autophagy.
IC50 & Target[1][2]	TRPM2 channel Autophagy

体外研究(In Vitro)	In mouse embryonic fibroblasts (MEFs), H2O2 treatment demonstrates that the activation of poly(ADP-ribose) (PAR) polymerase-1 (PARP-1) produced Adenosine 5′-diphosphoribose (ADP ribose), which is an activating signal for TRPM2 channels, thereby promoting Ca elevation through extracellular Ca influx and (or) lysosomal Ca release. This process eventually activates early or late autophagy in response to different degrees of oxidative stress. TRPM2 channels are activated by binding of Adenosine 5′-diphosphoribose (ADP ribose) to the intracellular NUDT9-homology (NUDT9-H) domain unique to TRPM2 and located at its C terminus. In addition to ADPR, intracellular Ca is an essential coactivator: TRPM2 channels open only in the combined presence of both ligands. has not independently confirmed the accurac
包装储存	-20°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: H_2O : 125 mg/mL (215.04 mM; Need ultrasonic)DMSO : 25 mg/mL (43.01 mM; ultrasonic and warming and heat to 80°C)配制储备液