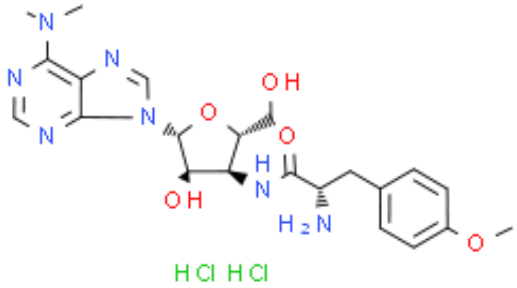
Product Data Sheet

Cas No.:	58-58-2	Cat. No:	PC61233
Product Name:	Puromycin dihydrochloride		
Product synonym:	嘌呤霉素二盐酸盐;嘌呤霉素盐酸盐;Puromycin 嘌呤霉素;二盐酸嘌呤霉素;嘌呤霉素;嘌呤霉素,2HCl;嘌呤霉素二盐酸盐水合物;二氢氯化嘌呤毒素;嘌呤霉素,二盐酸		
Chemical name:	Puromycin dihydrochloride		
MF:	C22H31CL2N7O5	FW:	544.43
Purity:	≥99%	Batch No.:	-
Storage:			
Structural formula:			
λmax:	-	Formulation:	-
Solubility :			
SMILES :	C1C=C(OC)C=CC=1C[C@@H](C(=O)N[C@H]1[C@H]([C@H](N2C=NC3=C(N(C)C)N=CN=C32)O[C@@H]1CO)O)N.Cl.Cl		
InChI Code:	-		
InChI Key:			
WARNING This product is not for human or veterinary use.			

Product Description

Puromycin dihydrochloride (CL13900 dihydrochloride) 是一种氨基核苷类抗生素，抑制蛋白合成 (protein synthesis)。Puromycin dihydrochloride (CL13900 dihydrochloride) 是一种氨基核苷类抗生素，抑制蛋白合成 (protein synthesis)。

生物活性	Puromycin dihydrochloride (CL13900 dihydrochloride), an aminonucleoside antibiotic, inhibits protein synthesis.
IC50 & Target[1][2]	Aminoglycoside

体外研究(In Vitro)

Puromycin blocks protein synthesis after aminoacyl-sRNA formation, and at the same time it leads to the accumulation of small peptides. Both of these effects appear to be due to the splitting of ribosome-bound peptidyl-sRNA,4 which results in release of incomplete peptide chains..

Puromycin, an analog of the 3 end of aminoacyl-tRNA, causes premature termination of translation by being linked non-specifically to growing polypeptide chains. Puromycin has two modes of inhibitory action. The first is by acting as an acceptor substrate which attacks peptidyl-tRNA in the P site to form a nascent peptide. The second is by competing with aminoacyl-tRNA for binding to the A site.

When used in minimal amounts, puromycin incorporation in neosynthesized proteins reflects directly the rate of mRNA translation *in vitro*. Puromycin immunodetection is an advantageous alternativ

包装储存

4°C, sealed storage and away from moisture； *In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage and away from moisture)；

溶解度数据

体外研究:

H_2O : 50 mg/mL(91.84 mM;Need ultrasonic and warming)

DMSO : 50 mg/mL(91.84 mM;Need ultrasonic)

Ethanol : 5 mg/mL(9.18 mM;ultrasonic and warming and heat to 60°C)