

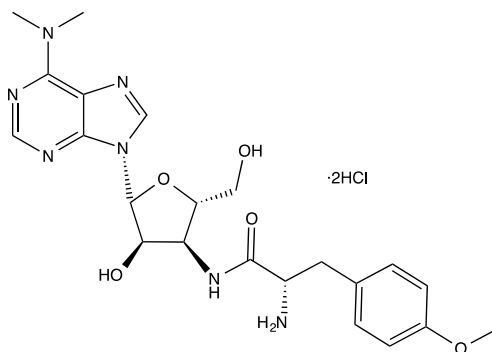
Catalog # 10-2100

Puromycin

CAS# 58-58-2

(S)-3'-[[2-amino-3-(4-methoxyphenyl)-1-oxopropyl]-amino]-3'-deoxy-N,N-dimethyl-adenosine dihydrochloride

Lot # X102175



Puromycin is an aminonucleoside antibiotic derived from *Streptomyces alboniger*. It is a protein synthesis inhibitor that disrupts peptide transfer on ribosomes causing premature chain termination.¹ It is an inhibitor of dipeptidyl-peptidase II and cytosolic alanyl aminopeptidase.² Puromycin also inhibits protein transport in mitochondria.³

- 1) Azzam and Algranati; (1973) *Mechanism of puromycin action: fate of ribosomes after release of nascent polypeptide chains from polysomes* Proc.Nat.Acad.Sci.USA **70** 3866
- 2) Bhutani *et al.* (2007) *Puromycin-sensitive aminopeptidase is the major peptidase responsible for digesting polyglutamine sequences by proteasomes during protein degradation* EMBO J. **26** 1385
- 3) Price and Verner (1993) *Puromycin inhibits protein import into mitochondria by interfering with an intramitochondrial ATP-dependent reaction* Biochim.Biophys.Acta **1150** 89

PHYSICAL DATA

Molecular Weight:	544.43
Molecular Formula:	C ₂₂ H ₂₉ N ₇ O ₅ ·2HCl
Purity:	>98%
	NMR: (Conforms)
Solubility:	DMSO (up to 50 mg/ml); water (up to 50 mg/ml)
Physical Description:	Tan solid
Storage and Stability:	Store as supplied at -20°C for up to 1 year from the date of purchase. Protect from exposure to air. Solutions in DMSO and water may be stored at -20°C for up to 1 month.

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