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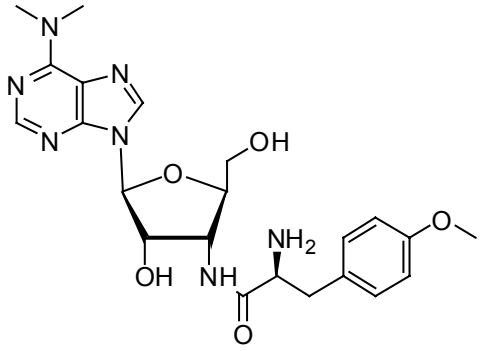
PRODUCT DATA SHEET

Puromycin

Code: **BIA-P1230**

Pack sizes: **25 mg, 100 mg**



Synonyms : **Achromycin, Stillomycin, Stylomycin, Antibiotic CL 13900, Antibiotic 3123L, Antibiotic P638, Bacterenomycin**

Specifications

CAS #	:	**53-79-2**
Molecular Formula	:	**$C_{22}H_{29}N_7O_5$**
Molecular Weight	:	**471.5**
Source	:	***Streptomyces alboniger***
Appearance	:	**White powder**
Purity	:	**> 98%**
Long Term Storage	:	**- 20°C**
Solubility	:	**Soluble in methanol, ethanol with moderate water solubility.**

Application Notes

Puromycin is a nucleoside antibiotic isolated from *Streptomyces alboniger* in the 1950s as an anti-trypansomal agent with antibiotic activity. Puromycin is non-selective, inhibiting RNA blocking ribosomal translation. Puromycin is used in cell biology to select mammalian cell lines that have been transformed by vectors that express puromycin-N-acetyl-transferase.

References

1. Achromycin, the structure of the antibiotic puromycin. Waller C.W.J., Am. Chem. Soc. 1953, 75, 2025.
2. Biosynthesis of puromycin by *Streptomyces alboniger*. Characterization of puromycin N-acetyltransferase. Vara J. et al., Biochemistry 1985, 24, 8074.
3. Unexpected cytokinetic effects induced by puromycin include a G2- arrest, a metaphase-mitotic-arrest, and apoptosis. Davidoff A.N. & Mendelow B.V., Leuk. Res. 1992, 16, 1077.
4. Puromycin inhibition of protein synthesis: incorporation of puromycin into peptide chains. Nathans D., Proc. Nat. Acad. Sci. 1964, 51, 585.
5. Effect of puromycin analogues and other agents on peptidyl-puromycin synthesis on polyribosomes. Petska S. et al., Antimicrobial Agents Chemother. 1973, 4, 37.

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