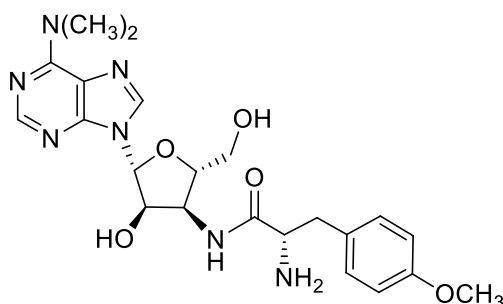


## Puromycin

Code No.: **BIA-P1230**

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



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

## Specifications

CAS #	: 53-79-2
Molecular Formula	: C <sub>22</sub> H <sub>29</sub> N <sub>7</sub> O <sub>5</sub>
Molecular Weight	: 471.5
Source	: <i>Streptomyces alboniger</i>
Appearance	: White powder
Purity	: >95% by HPLC
Long Term Storage	: -20°C
Solubility	: Soluble in ethanol, methanol, DMF or DMSO. Moderate water solubility.

## Application Notes

Puromycin is a nucleoside antibiotic isolated from *Streptomyces alboniger* in the 1950s as an anti-trypanosomal agent with antibiotic activity. Puromycin is non-selective, inhibiting RNA by 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.
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3. Unexpected cytokinetic effects induced by puromycin include a G<sub>2</sub>- 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.