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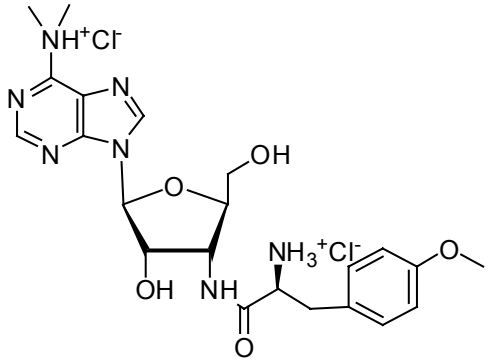
PRODUCT DATA SHEET

Puromycin dihydrochloride

Code: **BIA-P1221**

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



Synonyms : **Antibiotic CL 16536, NSC 3055**

Specifications

CAS #	:	**58-58-2**
Molecular Formula	:	**$C_{22}H_{31}Cl_2N_7O_5$**
Molecular Weight	:	**544.4**
Source	:	***Streptomyces alboniger***
Appearance	:	**White powder**
Purity	:	**> 98%**
Long Term Storage	:	**- 20°C**
Solubility	:	**Soluble in water.**

Application Notes

Puromycin dihydrochloride has been formulated as a salt to achieve higher water solubility. While the salt shares the same pharmacological properties as puromycin free base, its greater water solubility may offer advantages in some *in vitro* applications. Physio-chemical properties and chromatographic behaviour will depend on whether the pH is buffered or controlled applications. In non-pH controlled systems the free base and salt may behave differently.

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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