

PRODUCT DATA SHEET

Code No.: BIA-P1221

Pack sizes.: 25mg, 100mg

Puromycin dihydrochloride

Synonyms:

Stylomycin dihydrochloride, CL 13900 dihydrochloride, CL16536, NSC 3055, P638 dihydrochloride.

Specifications

CAS # : 58-58-2

Molecular Formula : C22H31Cl2N7O5

Molecular Weight : 544.4

Source :-

Appearance : White powder
Purity : >98% by HPLC

Long Term Storage : -20°C

Solubility : Soluble in ethanol, methanol, DMF or DMSO. Good water solubility.

Application Notes

Puromycin dihydrochloride is a salt of puromycin, a nucleoside antibiotic isolated from Streptomyces alboniger in the 1950s as an anti-trypansomal agent with antibiotic activity. While the salt shares the same pharmacological properties as puromycin free base, its greater water solubility offers advantages in some in vitro applications. Physicochemical properties and chromatographic behaviour will depend on whether the pH is buffered. 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. Effect of puromycin analogues and other agents on peptidyl-puromycin synthesis on polyribosomes. Petska

S. et al., Antimicrobial Agents Chemother. 1973, 4, 37.