

## **Puromycin Dihydrochloride**

**ALTERNATE NAME:** 3'-[α-Amino-*p*-methoxyhydrocinnamamido]-3'-deoxy-N,N-

dimethyladenosine dihydrochloride

**CATALOG #:** 1860-25, 100, 250, 500, 1000

**AMOUNT:** 25 mg, 100 mg, 250 mg, 500 mg, 1 g

STRUCTURE:

MOLECULAR FORMULA: C<sub>22</sub>H<sub>29</sub>N<sub>7</sub>O<sub>5</sub> · 2HCl

MOLECULAR WEIGHT: 544.43

**CAS NUMBER:** 58-58-2

APPEARANCE: White to off-white solid

**SOLUBILITY:** Water (~50 mg/ml)

PURITY: ≥98% by HPLC

STORAGE: Store at -20 °C

**DESCRIPTION:** A nucleoside antibiotic. It inhibits protein synthesis by

disrupting peptide transfer on ribosomes causing premature chain termination during translation. It is a potent translational inhibitor in both prokaryotic and eukaryotic cells. Resistance

to puromycin is conferred by the puromycin N-acetyl-transferase gene (pac) from Streptomyces. Puromycin has a

fast mode of action, causing rapid cell death at low antibiotic concentrations. Adherent mammalian cells are sensitive to concentrations of 2 to 5  $\mu$ g/ml, while cells in suspension are

sensitive to concentrations as low as 0.5 to 2 µg/ml.

**HANDLING:** Do not take internally. Wear gloves and mask when handling

the product! Avoid contact by all modes of exposure.

## FOR RESEARCH USE ONLY! Not to be used on humans.

## **RELATED PRODUCTS**

- Blasticidin S Hydrochloride (Cat. No. 1859-25, 100)
- Cycloheximide (Cat. No. 1041-1G, 5G)
- Cycloheximide (100 mM) (Cat. No. 1041-1)
- G-418 Sulfate (Cat. No. 1557-100, 5G, 25G)
- EZSolution™ Puromycin DiHydrochloride (Cat. No. 1861-100)