

## Puromycin dihydrochloride (Synonyms: CL13900 dihydrochloride)

Catalog #: EBC51170

**Biological Activity** 

**Chemical Name** 

(2S)-2-amino-N-[(2S,3S,4R,5R)-5-[6-(dimethylamino)purin-9-yl]-4-hydroxy-2-(hydroxymethyl)oxolan-3-

yl]-3-(4-methoxyphenyl)propanamide;dihydrochloride

Application Puromycin dihydrochloride is an antibiotic used for selection and maintenance of cell lines expressing a

transfected pac gene

Target & IC<sub>50</sub> Aminoglycoside

**CAS No.** 58-58-2

**Purity** ≥98.0%

Molecular Weight 544.43

Molecular Formula C<sub>22</sub>H<sub>29</sub>N<sub>7</sub>O<sub>5</sub>•2HCl

Shipping Gel Pack

Storage Store at -20° C

OH OHCI

### Solubility

DMSO: 50 mg/mL (20 mM); Water: 50 mg/mL (20 mM)

PS: < 1 mg/ml refers to the product insoluble

#### **Preparing Stock Solutions**

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	1.8368 ml	9.1839 ml	18.3678 ml
5 mM	0.3674 ml	1.8368 ml	3.6736 ml
10 mM	0.1837 ml	0.9184 ml	1.8368 ml
50 mM	0.0367 ml	0.1837 ml	0.3674 ml

#### Description

Puromycin dihydrochloride, also known as Stylomycin hydrochloride, is an aminonuclease antibiotic used for selection and maintenance of cell lines expressing a transfected pac gene, whose product, puromycin-N-acetyl-transferase, inactivates puromycin via acetylation. Puromycin dihydrochloride has been cell culture tested and is recommended for selection of stably transfected cells following transfection with Santa Cruz Biotechnology shRNA or Lentiviral particles. Puromycin dihydrochloride is an antibiotic substance produced by the soil actinomycete Streptomyces alboniger which induces apoptosis in cells by interfering with RNA function, leading to inhibition of protein synthesis. Puromycin dihydrochloride is thought to act as an acyl-tRNA analogue causing premature chain termination. Toxic to both eukaryotic and prokaryotic cells, Puromycin dihydrochloride has also been shown to arrest cells in G2/M phase.

# For Reserch Use Only. Not For Use In Diagnostic Procedures

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