Hello Bio, Inc. 304 Wall St., Princeton, NJ 08540 USA

T. 609-683-7500 F. 609-228-4994

customercare-usa@hellobio.com



DATASHEET

Puromycin dihydrochloride

Product overview

Name Puromycin dihydrochloride

Cat No HB4041

Applications Cell Culture, Selection Agent

Purity >98%

Description Protein synthesis inhibitor. Cell culture selection antibiotic.

Biological Data

Biological description Aminonucleoside antibiotic which disrupts peptide transfer on ribosomes on both prokaryotic and

eukaryotic ribosomes to cause premature chain termination during translation.

It inhibits protein transport of into the mitochondria and also induces apoptosis and shows

antineoplastic and antibacterial activity.

It is widely used as a selection antibiotic in cell culture. Puromycin allows the selection of cells that

contain the puromycin N-acetyl-transferase gene (PAC) resistance gene.

Solubility & Handling

Solubility overview Soluble in DMSO (100 mM) and water (100 mM)

Storage instructions -20°C

Storage of solutions Prepare and use solutions on the same day if possible. Store solutions at -20 °C for up to one month if

storage is required. Equilibrate to RT and ensure the solution is precipitate free before use.

Handling This compound is light sensitive; exposure to light may affect compound performance. We therefore

recommend storing the solid material and any solutions in the dark and protecting from light.

CN(C)C1=NC=NC2=C1N=CN2[C@H]3[C@@H]([C@@H]([C@H](O3)CO)NC(=O)[C@H](CC4=CC=

Shipping Conditions Stable for ambient temperature shipping. Follow storage instructions on receipt.

Important This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not

for human or veterinary use.

Chemical Data

Chemical name 3'-[a-Amino-p-methoxyhydrocinnamamido]-3'-deoxy-N,N-dimethyladenosine dihydrochloride

Molecular Weight

Chemical structure

C₂₂H₂₉N₇O₅.2HCl

Molecular Formula CAS Number

58-58-2

PubChem identifier SMILES 443311

544.43

C(C=C4)OC)N)O.Cl.Cl

InChiKey RXWNCPJZOCPEPQ-VJWOANPKSA-N

MDL number MFCD00012691
Appearance White to off-white

References

Puromycin inhibits protein import into mitochondria by interfering with an intramitochondrial ATP-dependent reaction.

Price and Verner (1993) Biochim Biophys Acta. 1150(1)

PubMedID 8334141

Complexes between nascent polypeptides and their molecular chaperones in the cytosol of mammalian cells.

Eggers et al (1997) Mol Biol Cell 8(8)

PubMedID 9285825

Dipeptidyl arylamidase II of the pituitary. Properties of lysylalanyl-beta-naphthylamide hydrolysis: inhibition by cations, distribution in tissues, and subcellular localization.

McDonald et al (1968) J Biol Chem 243(8) **PubMedID**5646493