

**Puromycin Dihydrochloride ,25MG****PG-395-25MG**

Puromycin dihydrochloride is an antibiotic and molecular biology tool used to select genetically modified cells. It mimics aminoacyl-tRNA and is incorporated into growing proteins, causing premature chain termination and stopping protein synthesis, which leads to rapid cell death in sensitive cells.

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<b>Parameter</b>	<b>Details</b>
<b>Product Name</b>	Puromycin Dihydrochloride
<b>Description</b>	Aminonucleoside antibiotic used to inhibit protein synthesis by causing premature chain termination during translation. Commonly used for selection of genetically modified cells carrying the puromycin resistance gene (pac).
<b>Molecular Weight</b>	544.5 g/mol
<b>Appearance</b>	White to off-white crystalline powder
<b>Formula</b>	$C_{22}H_{29}N_7O_5 \cdot 2HCl$
<b>Solubility</b>	Highly soluble in water; soluble in methanol; insoluble in non-polar solvents
<b>pH (1% Solution)</b>	4.5 – 6.5
<b>CAS Number</b>	58-58-2
<b>Storage Condition</b>	2–8°C (short term); –20°C (long term). Keep tightly closed and protected from moisture and light.
<b>Applications / Uses</b>	Selection of stable and transient transfected mammalian, yeast, insect, and bacterial cells; gene expression studies

**Safety**

Handle in accordance with good laboratory practices. Avoid inhalation of dust and contact with skin, eyes, and clothing. Wear appropriate personal protective equipment (lab coat, gloves, and safety glasses). Wash thoroughly after handling. In case of contact with eyes or skin, rinse immediately with plenty of water.