

# Produktinformation



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#### SZABO-SCANDIC HandelsgmbH

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# Data Sheet (Cat.No.T2219)

# TargetM**Ò**I

## Puromycin dihydrochloride

Chemical Proper	ties	
CAS No. :	58-58-2	
Formula:	C22H31Cl2N7O5	
Molecular Weight:	544.44	HO
Appearance:	no data available	
Storage:	Powder: -20°C for 3 years   In solvent: -80°C for 1 year	С., °-сн,

#### **Biological Description**

Description	Puromycin dihydrochloride (CL13900 dihydrochloride) is a cinnamamide adenosine antibiotic and an inhibitor of protein synthesis. Puromycin dihydrochloride inhibits protein synthesis by binding to RNA and has antitumor and antitrypanosomal activity.
Targets(IC50)	ribosome,DNA/RNA Synthesis,Antibacterial,Antibiotic
In vitro	<ul> <li>METHODS: Human hepatocellular carcinoma cells, HepG2, and primary rat hepatocytes, PRH, were treated with Puromycin dihydrochloride (0-300 µmol/L) for 72 h, and cell growth inhibition was detected by MTT.</li> <li>RESULTS: Puromycin dihydrochloride dose-dependently inhibited the growth of HepG2 and PRH cells, with IC50s of 1600 µmol/L and 2000 nmol/L, respectively.[1]</li> <li>METHODS: Human breast cancer cells MDA-MB-231 and MDA-MB-436 were transfected with shRNAs-Puro lentivirus, and after 24 h, the transfected cells were cultured in new medium containing Puromycin dihydrochloride (1 µg/ml) for about 12 days, and then the cells were screened for the success of transfection.</li> <li>RESULTS: Puromycin dihydrochloride screened the lentivirally transfected cells successfully. [2]</li> <li>METHODS: Cells transfected with lentivirus were cultured in medium supplemented with Puromycin dihydrochloride screened and maintained lentivirally successfully transfected cells. [3]</li> </ul>
In vivo	Puromycin is utilized to select recombinant cells from non-cultured cells. It serves as a tool for studying protein synthesis in many systems.

Solubility Information	
Solubility	H2O: 92 mg/mL (169 mM), Ethanol: < 1 mg/mL (insoluble or slightly soluble),  br/>DMSO: 60 mg/mL (110.2 mM), (< 1 mg/ml refers to the product slightly soluble or insoluble)

## A DRUG SCREENING EXPERT

#### Preparing Stock Solutions

	1mg	5mg	10mg	
1 mM	1.8367 mL	9.1837 mL	18.3675 mL	
5 mM	0.3673 mL	1.8367 mL	3.6735 mL	
10 mM	0.1837 mL	0.9184 mL	1.8367 mL	
50 mM	0.0367 mL	0.1837 mL	0.3673 mL	

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

#### Reference

Wang Y N, Ruan D Y, Wang Z X, et al. Targeting the cholesterol-RORα/γ axis inhibits colorectal cancer progression through degrading c-myc. Oncogene. 2022: 1-13.

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