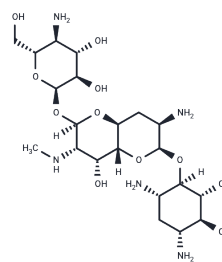


## Apramycin (Nebramycin II)

## Chemical Properties

CAS No. :	37321-09-8
Formula:	C <sub>21</sub> H <sub>41</sub> N <sub>5</sub> O <sub>11</sub>
Molecular Weight:	539.58
Storage:	Powder: -20°C for 3 years   In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.



## Biological Description

Description	Apramycin(Nebramycin II) is an aminoglycoside antibiotic used in veterinary medicine. Target: Apramycin stands out among aminoglycosides for its mechanism of action which is based on blocking translocation and its ability to bind also to the eukaryotic decoding site despite differences in key residues required for apramycin recognition by the bacterial target. The drug binds in the deep groove of the RNA which forms a continuously stacked helix comprising non-canonical C.A and G.A base pairs and a bulged-out adenine. The binding mode of apramycin at the human decoding-site RNA is distinct from aminoglycoside recognition of the bacterial target, suggesting a molecular basis for the actions of apramycin in eukaryotes and bacteria.
Targets(IC50)	Others,Antibacterial,Antibiotic

## Solubility Information

Solubility	DMSO: Soluble (< 1 mg/ml refers to the product slightly soluble or insoluble)
------------	--

## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.8533 mL	9.2665 mL	18.5329 mL
5 mM	0.3707 mL	1.8533 mL	3.7066 mL
10 mM	0.1853 mL	0.9266 mL	1.8533 mL
50 mM	0.0371 mL	0.1853 mL	0.3707 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.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Apramycin, From Wikipedia

Sun Q, Yan J, Long S, et al. Apramycin has high in vitro activity against Mycobacterium tuberculosis. Journal of Medical Microbiology. 2024, 73(7): 001854.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel: 781-999-4286 E\_mail: info@targetmol.com Address: 34 Washington Street, Wellesley Hills, MA 02481