



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!  
See the following pages for more information!



### Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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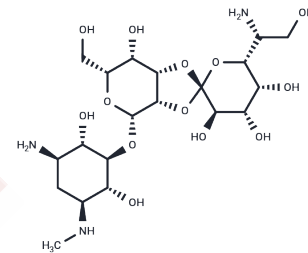
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## Hygromycin B

## Chemical Properties

CAS No. :	31282-04-9
Formula:	C <sub>20</sub> H <sub>37</sub> N <sub>3</sub> O <sub>13</sub>
Molecular Weight:	527.52
Appearance:	no data available
Storage:	keep away from moisture Powder: -20°C for 3 years   In solvent: -80°C for 1 year



## Biological Description

Description	Hygromycin B (Hygrovetine) is an aminoglycoside antibiotic that inhibits protein synthesis by interfering with translocation and causing mistranslation of the 70S ribosome. Hygromycin B can be used to screen prokaryotic or eukaryotic cells transfected with hph or hyg resistance genes.
Targets(IC50)	ribosome, Antibacterial, Antibiotic, Antifungal
In vitro	<p><b>METHODS:</b> Mouse PDAC cells 14387T were transfected with lentiCRISPRv2 hygro lentivirus, and after 48 h, the transfected cells were cultured in new medium containing Hygromycin B (500 µg/mL) for two weeks, and the successful transfected cells were screened.</p> <p><b>RESULTS:</b> Puromycin dihydrochloride screened the lentivirally successfully transfected cells. [1]</p> <p><b>METHODS:</b> E. coli was cultured in medium containing Hygromycin B (0-8 µg/mL) and cell growth was monitored using a Klett-Summerson colorimeter.</p> <p><b>RESULTS:</b> Hygromycin B reduced the number of viable cells and increased doubling time in a concentration-dependent manner. Hygromycin B inhibited the number of viable cells by 50% at a concentration of 20 µg/mL, and halved the rate of growth at a concentration of 25 µg/mL. [2]</p>
In vivo	<p><b>METHODS:</b> To assay antiviral activity in vivo, Hygromycin B (0-5 µmol/kg) was administered intraperitoneally to MHV-A59-infected BALB/c mice twice daily for three days.</p> <p><b>RESULTS:</b> Hygromycin B was able to reduce the levels of viral replication and necrotic liver foci in vivo. [3]</p>

## Solubility Information

Solubility	DMSO: 30 mg/mL (56.87 mM), Saline: 527.52 mg/mL (94.78 mM) ( < 1 mg/ml refers to the product slightly soluble or insoluble)
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### Preparing Stock Solutions

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	1mg	5mg	10mg
1 mM	1.8957 mL	9.4783 mL	18.9566 mL
5 mM	0.3791 mL	1.8957 mL	3.7913 mL
10 mM	0.1896 mL	0.9478 mL	1.8957 mL
50 mM	0.0379 mL	0.1896 mL	0.3791 mL

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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

Fan M, Huo S, Guo Y, et al.UDP-glucose dehydrogenase supports autophagy-deficient PDAC growth via increasing hyaluronic acid biosynthesis.Cell Reports.2024, 43(2): 113808.

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

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