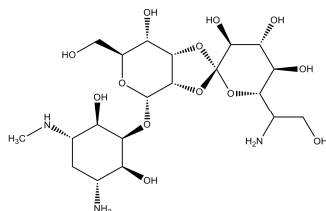


**PRODUCT: Hygromycin B**

**ALTERNATE NAME:** (3'R,3aS,4S,4'R,5'R,6R,6'R,7S,7aS)-4-[(1R,2S,3R,5S,6R)-3-amino-2,6-dihydroxy-5-(methylamino)cyclohexyl]oxy-6'-[[1S)-1-amino-2-hydroxyethyl]-6-(hydroxymethyl)spiro[4,6,7,7a-tetrahydro-3aH-[1,3]dioxolo[4,5-c]pyran-2,2'-oxane]-3',4',5',7-tetrol

**CATALOG #:** 2589-500, 1000

**AMOUNT:** 500 mg, 1 g

**STRUCTURE:**

**MOLECULAR FORMULA:**  $C_{20}H_{37}N_3O_{13}$

**MOLECULAR WEIGHT:** 527.52

**CAS No.** 31282-04-9

**APPEARANCE:** Off-white to light tan powder

**SOLUBILITY:**  $H_2O$  (~ 50 mg/ml)

**PURITY:** ≥90% by HPLC

**STORAGE:** Store at 2-8°C. Protect from light and moisture

**DESCRIPTION:** Hygromycin B is an aminoglycoside antibiotic produced by *Streptomyces hygroscopicus* that is routinely used as a selection agent for cells that contain *hph* or *hyg* Hygromycin resistant gene. Hygromycin B is thought to inhibit protein synthesis by strengthening the interaction of peptidyl-tRNA in the ribosomal acceptor ("A") site thereby preventing translocation of by EF-2 (elongation Factor-2). Hygromycin B is effective on most bacteria, fungi and higher eukaryotes.

**REFERENCES:** Brodersen, D.E., *et al.* (2000). *Cell* **103**, 1143-1154.

**ANDLING:** Do not take internally. Wear gloves and mask when handling the product! Avoid contact by all modes of exposure.

**RELATED PRODUCTS:**

Amphotericin B (Cat. No. 2497-250, 1G, 5G)  
 Ampicillin trihydrate (Cat. No. 2483-1 G, 5G, 25 G)  
 Ampicillin sodium (Cat. No. 2484-1G, 5G, 25G)  
 EZSolution™ Ampicillin sodium (Cat. No. 2499-10)  
 Betulinic Acid (Cat. No. 1552-25)  
 Bexarotene (Cat. No. 1575-5, 50)  
 Blasticidin S, Hydrochloride (Cat. No. 1859-25,100)  
 Capecitabine (Cat. No. 1741-100, 1000)  
 Carboplatin (Cat. No. 1553-100)  
 Chloramphenicol (Cat. No. 2486-25G, 100G, 500G)  
 Cisplatin (Cat. No. 1550-100,1000)  
 Cycloheximide (Cat. No. 1041-1G, 5G)  
 Cycloheximide (100 mM) (Cat. No. 1041-1)  
 Daptomycin (Cat. No. 2582-10, 50)  
 Daunorubicin.HCl (1524-10,50,500)  
 Doxorubicin HCl (Cat. No. 1527-5)  
 Fludarabine Phosphate (Cat. No. 1763-10, 50)  
 G-418 Sulfate (Cat. No. 1557-100, 5G, 25G)  
 Gemcitabine Hydrochloride (Cat. No. 1759-25, 100)  
 Genistein (Cat. No. 1533-10)  
 Nedaplatin (Cat. No. 1576-5)  
 Oxaliplatin (Cat. No. 1577-25)  
 Paclitaxel (Cat. No. 1567-25)  
 Penicillin G sodium (Cat. No. 2503-100, 500)  
 Penicillin G potassium (Cat. No. 2504-25, 100)  
 Polymyxin B Sulfate (Cat. No. 2496-10, 50, 100)  
 Puromycin DiHydrochloride (Cat. No. 1860-25, 100, 250, 500,1000)  
 EZSolution™ Puromycin Dihydrochloride (Cat. No. 1861-100)  
 Streptozocin (Cat. No. 1930-100, 500, 1000)  
 Tamoxifen Citrate (Cat. No. 1551-1000)

**USAGE:** **FOR RESEARCH USE ONLY! Not to be used in humans.**