invitrogen
by Thermo Fisher Scientific

Hygromycin B

Cat. No.: 10687-010 Size: 1 g (20 mL)
Store at 4°C

Description

Hygromycin B is an aminoglycosidic antibiotic produced by *Streptomyces hygroscopicus* that kills bacteria, fungi and higher eukaryotic cells by inhibiting protein synthesis.[1-3] It is used for the selection of pro- and eukaryotic cells, stably transfected with the hygromycin resistance gene, as well as for the maintenance of the hygromycin phenotype of resistant cells. The resistance gene codes for a kinase that inactivates Hygromycin B through phosphorylation (Hygromycin B Phosphotransferase). Cloning of the resistance gene and fusion with eukaryotic promoters has resulted in the construction of vectors that allow selection for resistance to Hygromycin B in both prokaryotic and eukaryotic systems.
Hygromycin B is supplied as a 50 mg/ml solution in PBS (phosphate-buffered saline).

Instructions for Use

Hygromycin B is added to the culture medium at a concentration that varies with cell type transfected. Recommended concentration for the selection of resistant cells is 25-1000 µg/mL. Commonly used concentrations for selection of various cell types are 200 µg/ mL for mammalian cells, 20-200 µg/ mL for plant cells, bacteria and 200-1000 µg/ mL for fungi. The optimal concentration should be tested experimentally and may vary with cell type.

For Research Use Only. Not for use in diagnostic procedures.

Part no. 10687010.pps Rev. 2.0 Rev date: 08Dec2021

Applications

Cell Type	References
Microrganism	
Agrobacteria	27
Bacteria	5,13
Fungi	4, 5, 15
Plant	
Tobacco	13, 19, 27
Potato	27
Rice	28
Animal	
Chicken	17
Mouse	6, 7, 9, 10, 11, 12, 18, 21
Rat	16
Human	8, 14, 20, 21

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