

# Hygromycin B

## Technical Update

### INTRODUCTION

InvivoGen's high-purity HygroGold™ has been renamed Hygromycin B Gold and the standard Hygromycin B has been discontinued. This protocol is provided to facilitate the transition from using Hygromycin B (cat. code ant-hm-1, ant-hm-5) to Hygromycin B Gold (cat. code ant-hg-1, ant-hg-5). As Hygromycin B Gold is ~20% more potent than Hygromycin B, you may need to adjust your working concentrations.

*Note: If you have optimized your experiments with HygroGold™, you do not need to adjust your working concentration.*

### ANTIBIOTIC WORKING CONCENTRATIONS

Most cells growing aerobically are killed by Hygromycin B Gold in the concentration range of 50 to 500 µg/ml.

#### *Escherichia coli*

Hygromycin-resistant transformants can be selected with Hygromycin B Gold at 50 to 100 µg/ml. If you notice unusually low transformation efficiency when switching to Hygromycin B Gold, you may need to adjust your working concentrations. For example, if you have optimized your selection experiments with 100 µg/ml Hygromycin B (cat. code ant-hm-1, ant-hm-5), then consider using Hygromycin B Gold at a reduced concentration of 80 µg/ml. For optimum results, we recommend the use of InvivoGen's *E. coli* FastMedia® Hygro: microwaveable, ready-to-use solid (cat. code fas-hg-s) or liquid (cat. code fas-hg-l) media supplemented with Hygromycin B.

#### Mammalian cells

The working concentrations of Hygromycin B Gold for mammalian cell lines vary from 50 to 200 µg/ml, in a few cases up to 500 µg/ml. If you notice unusually high cytotoxicity when switching to Hygromycin B Gold, you may need to adjust your working concentrations. Suggested concentrations of Hygromycin B Gold for selection in some examples of mammalian cells are listed below.

Cell line	Species	Tissue	Medium	Hygromycin B (µg/ml)	Equivalent concentrations (µg/ml)	
					Hygromycin B cat. code ant-hm-1, ant-hm-5	Hygromycin B Gold cat. code ant-hg-1, ant-hg-5
B16	Mouse	Melanoma	RPMI	100-200	200	160
CHO	Hamster	Ovary	MEM	100-500	500	400
HeLa	Human	Cervix	DMEM	100-200	200	160
HEK293	Human	Kidney	DMEM	50-400	400	320
Raji	Human	Lymphoma	RPMI	125-300	300	240
THP-1	Human	Monocytes	RPMI	200-400	400	320

#### TECHNICAL SUPPORT

InvivoGen USA (Toll-Free): 888-457-5873

InvivoGen USA (International): +1 (858) 457-5873

InvivoGen Europe: +33 (0) 5-62-71-69-39

InvivoGen Hong Kong : +852 3-622-34-80

E-mail: [info@invivogen.com](mailto:info@invivogen.com)