SOLUTIONS FOR WORKING WITH BACTERIOPHAGE λ

Maltose

Maltose, an inducer of the gene (*lamB*) that codes for the bacteriophage λ receptor, is often added to the medium during growth of bacteria that are to be used for plating bacteriophage λ. Add 1 ml of a sterile 20% maltose solution for every 100 ml of medium.

Make up a sterile 20% stock solution of maltose as follows:

maltose	20 g
H_2O to 100 ml	

Sterilize the solution by filtration through a 0.22-micron filter. Store the sterile solution at room temperature.

SM

This buffer is used for storage and dilution of bacteriophage λ stocks.

Per liter:

NaCl	5.8 g
$MgSO_4 \cdot 7H_2O$	2 g
1 M Tris · Cl (pH 7.5)	50 ml
2% gelatin solution	5 ml
H_2O to 1 liter	

Sterilize the buffer by autoclaving for 20 minutes at 15 lb/sq. in. on liquid cycle. After the solution has cooled, dispense 50-ml aliquots into sterile containers. SM may be stored indefinitely at room temperature.

A 2% gelatin solution is made by adding 2 g of gelatin to a total volume of 100 ml of H_2O and autoclaving the solution for 15 minutes at 15 lb/sq. in. on liquid cycle.

TM

Per liter:

1 M Tris · Cl (pH 7.5)	50 ml
$MgSO_4 \cdot 7H_2O$	2 g
H_2O to 1 liter	

Sterilize the buffer by autoclaving for 20 minutes at 15 lb/sq. in. on liquid cycle. After the solution has cooled, dispense 50-ml aliquots into sterile containers. TM may be stored indefinitely at room temperature.