

# Bacterial Culture Media

NZY Broth	
5 g	NaCl
2 g	MgSO <sub>4</sub> • 7H <sub>2</sub> O
5 g	Yeast extract
10 g	NZ amine (Casein hydrosylate)
▶ Adjust the pH to 7.5 with NaOH	
All ingredients per liter	

M9 Medium	
6 g	Dibasic sodium phosphate (Na <sub>2</sub> HPO <sub>4</sub> )
3 g	Monobasic potassium phosphate (KH <sub>2</sub> PO <sub>4</sub> )
1 g	Ammonium chloride (NH <sub>4</sub> Cl)
	Water to 1 liter
▶ Autoclave	
▶ While autoclaving, make the following solution:	
1 ml	1M MgSO <sub>4</sub>
2 g	Glucose
0.1 ml	1 M CaCl <sub>2</sub>
1.0 ml	1 M thiamine-HCL
	Water to 10 ml
▶ Filter sterilize and add the above solutions to the cooled M9 media	
All ingredients per liter	

LB Broth	
10 g	NaCl
10 g	Typtone
5 g	Yeast extract
▶ Add deionized H <sub>2</sub> O to final volume of 1 liter	
▶ Adjust the pH to 7.0 with 5N NaOH	
▶ Autoclave	
All ingredients per liter	

NZY Top Agar	
1 liter	NZY Broth
0.7% (w/v)	Agarose
▶ Autoclave	
All ingredients per liter	

2X YT Broth	
16 g	Tryptone
10 g	Yeast extract
5 g	NaCl
▶ Adjust the pH to 7.0	
All ingredients per liter	

Terrific Broth	
12 g	Tryptone
24 g	Yeast extract
4 ml	glycerol
10 g	NZ amine (Casein hydrolysate)
▶ Adjust to 900 ml with deionized H <sub>2</sub> O	
▶ Autoclave and add 100 ml of sterilized 0.17M KH <sub>2</sub> PO <sub>4</sub> + 0.72 M K <sub>2</sub> HPO <sub>4</sub>	
All ingredients per liter	

SOB Medium	
20 g	Tryptone
5 g	Yeast extract
0.5 g	NaCl
▶ Add deionized H <sub>2</sub> O to final volume of 1 liter	
▶ Autoclave	
▶ Add 10 ml of 1M MgCl <sub>2</sub> and 10 ml of 1M MgSO <sub>4</sub> prior to use	
▶ Filter sterilize	
All ingredients per liter	

SOC Medium	
1 ml	2M filter sterilized glucose solution
	or
2 ml	20% (w/v) glucose
+ X ml	SOB medium
=	Total 100 ml of SOC medium
All ingredients per 100 ml	