

Culture Media for Molecular Biology

Alfa Aesar offers a selection of dehydrated culture media for the maintenance and culture of microorganisms for genetic and molecular studies.

H26676 **LB Broth (Miller's Modification)**

LB (Luria Beranti) broth is a nutritionally rich medium for the maintenance and culture of recombinant strains of *E. coli*.

Composition of the prepared medium:	Tryptone (pancreatic digest of casein)	10g/litre
	Sodium chloride	10g/litre
	Yeast Extract	5g/litre

Preparation: Suspend 25g of the dehydrated medium in 1 litre of distilled water. Heat with frequent agitation until completely dissolved. Sterilise in an autoclave at 121°C for 15 minutes. Store at 4°C.

H26760 **LB Broth (Lennox)**

A low salt version of LB broth. Used for selective cultivation of certain strains of *E. coli* for genetic and molecular studies.

Composition of the prepared medium:	Tryptone (pancreatic digest of casein)	10g/litre
	Sodium chloride	5g/litre
	Yeast Extract	5g/litre

Preparation: Suspend 20g of the dehydrated medium in 1 litre of distilled water. Heat with frequent agitation until completely dissolved. Sterilise in an autoclave at 121°C for 15 minutes. Store at 4°C.

H26824 **Terrific Broth**

A richer formulation than standard LB broth, used for cultivation of higher cell densities.

Composition of the prepared medium:	Yeast Extract	24g/litre
	Tryptone (pancreatic digest of casein)	12g/litre
	Dipotassium phosphate	12.5g/litre
	Monopotassium phosphate	2.3g/litre

Preparation: Suspend 50.8g of the dehydrated medium in 900ml of distilled water. Add 4ml glycerol and adjust the final volume to 1000ml with distilled water. Heat with frequent agitation until completely dissolved. Sterilise in an autoclave at 121°C for 15 minutes. Store at 4°C.

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H26271 **Yeast Nitrogen Base**

Used for the cultivation of yeasts. This formulation provides all the essential nutrients required for the growth of yeast cultures except for amino acids and carbohydrates. It is recommended for use in classifying yeasts based on carbon and nitrogen requirements.

Composition of the prepared medium: Yeast Nitrogen Base 1.7g/litre

Preparation: Prepare a 10X strength solution by dissolving 1.7g in 100ml of distilled water. Heat with frequent agitation until completely dissolved. DO NOT BOIL. DO NOT AUTOCLAVE. Sterilise the solution by filtration. Store at 4°C. Prepare the final medium by pipetting under sterile conditions 0.5ml of the 10X solution into 4.5ml of distilled water. Swirl to mix the solution prior to inoculation. The colour of the prepared medium is amber.

H26557 **YP Base Medium**

Used for the cultivation of yeasts. This formulation contains essential nutrients. When made up with the addition of carbohydrate, it is particularly suitable for cultivation of type species *Saccharomyces cerevisiae* for genetic studies.

Composition of the prepared medium: Tryptone (pancreatic digest of casein) 20g/litre

Yeast Extract 10g/litre

Preparation: Suspend 30g of the dehydrated medium in 900ml of distilled water. Heat with frequent agitation until completely dissolved. Sterilise in an autoclave at 121°C for 15 minutes. Cool to room temperature. Add 100ml of sterile 20% dextrose solution under sterile conditions. Mix well and store at 4°C.