SIGMA-ALDRICH

WAYMOUTH MB 752/1 MEDIUM
With L-Glutamine, Without Sodium Bicarbonate
Product Number **W1625**

Product Description
Waymouth Medium MB 752/1 was developed as a totally defined synthetic medium for cultivation of mouse L929 cells in a serum-free environment. The applicability of Waymouth Medium MB 752/1 has been extended to include whole organ culture, establishment of carcinoma cell lines from pleural effusions, and the growth of potentially tumorigenic cells prior to their assessment in vivo.

Components	g/L
Calcium Chloride(anhydrous)	0.0906
Magnesium Chloride (anhydrous)	0.112392
Magnesium Sulfate (anhydrous)	0.09767
Potassium Chloride	0.15
Potassium Phosphate Monobasic (anhydrous)	0.08
Sodium Chloride	6.0
Sodium Phosphate Dibasic (anhydrous)	0.3
L-Arginine•HCl	0.075
L-Aspartic Acid	0.06
L-Cysteine•HCl• H_2O	0.10029
L-Cystine•2HCl	0.01955
L-Glutamic Acid	0.15
L-Glutamine	0.35
Glycine	0.05
L-Histidine•HCl• H_2O	0.1641
L-Isoleucine	0.025
L-Leucine	0.05
L-Lysine•HCl	0.24
L-Methionine	0.05
L-Phenylalanine	0.05
L-Proline	0.05
L-Threonine	0.075
L-Tryptophan	0.04
L-Tyrosine•2Na•2H_2O	0.0577
L-Valine	0.065
Ascorbic Acid	0.0198
D-Biotin	0.00002
Choline Bitartrate	0.45352
Folic Acid	0.0004
myo-Inositol	0.001
Niacinamide	0.001
D-Pantothenic Acid (hemicalcium)	0.001
Pyridoxine•HCl	0.001
Riboflavin	0.001
Thiamine•HCl	0.01
Vitamin B-12	0.0002
D-Glucose	5.0
Glutathione (reduced)	0.015
Hypoxanthine	0.025
Phenol Red•Na	0.011

Precautions and Disclaimer
REAGENT
For R&D use only. Not for drug, household or other uses.

Preparation Instructions
Powdered media are hygroscopic and should be protected from moisture. The entire contents of each package should be used immediately after opening. Preparing a concentrated solution of medium is not recommended as precipitates may form. Supplements can be added prior to filtration or introduced aseptically to sterile medium.

1. Measure out 90% of final required volume of water. Water temperature should be 15-20°C.
2. While gently stirring the water, add the powdered medium. Stir until dissolved. Do NOT heat.
3. Rinse original package with a small amount of water to remove all traces of powder. Add to solution in step 2.
4. To the solution in step 3, add 2.24 g sodium bicarbonate or 29.9 ml of sodium bicarbonate solution [7.5%w/v] for each liter of final volume of medium being prepared. Stir until dissolved.
5. While stirring, adjust the pH of the medium to 0.1-0.3 pH units below the desired pH since it may rise during filtration. The use of 1N HCl or 1N NaOH is recommended.
6. Add additional water to bring the solution to final volume.
7. Sterilize immediately by filtration using a membrane with a porosity of 0.22 microns.
8. Aseptically dispense medium into sterile container.

Storage and Stability
Store the dry powdered medium at 2-8 °C under dry conditions and liquid medium at 2-8 °C in the dark. Deterioration of the powdered medium may be recognized by any or all of the following: [1] color change, [2] granulation/clumping, [3] insolubility. Deterioration of the liquid medium may be recognized by any or all of the following: [1] pH change, [2] precipitate or particulates, [3] cloudy appearance [4] color change. The nature of supplements added may affect storage conditions and shelf life of the medium. Product label bears expiration date.

Procedure
MATERIALS REQUIRED BUT NOT PROVIDED
Water for tissue culture use [W3500]
Sodium Bicarbonate [S5761] or
Sodium Bicarbonate Solution, 7.5% [S8761]
1N Hydrochloric Acid [H9892]
1N Sodium Hydroxide [S2770]
Medium additives as required

References

1. Waymouth, C. (1959) Rapid Proliferation of Sublines of NCTC Clone 929 (Strain L) Mouse Cells in a Chemically Defined Medium (MB 752/1), Journal of the National Cancer Institute, 22, 1003.

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