biolab **TECHNICAL SHEET** IVD CE

CULTURE MEDIA FOR AMINO ACID DECOMPOSITION STUDIES

Differential media for the differentiation of micro-organisms on the basis of their ability to decompose (decarboxylate or dihydrolysate) the amino acids.

Dehydrated media	
Code numbers:	See below
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving (25 °C):	See below

Direction: Suspend the indicated amount of dehydrated media listed below in one litre of distilled water. In case of bases add the appropriate amount of amino acid (in case of Moeller medium 10 g, in case of Falkow and Taylor media 5 g). Mix well and heat gently to dissolve the medium completely. Check the pH and read-just if necessary. Dispense into test tubes and sterilise by autoclaving at 121 °C for 15 minutes. After inoculation overlie the tubes aseptically with 4 – 5 mm sterile mineral oil (except Taylor Broth).

FORMULA in g/l

Moeller Broth Base	
Code number:	DBM20500
Peptone	10,500
Glucose	0,500
Pyridoxal	0,005
Bromocresol purple	0,010
Cresol red	0,005
11 g/l	pH = 5,9 – 6,3

Falkow Broth Base	
Code number:	DBF20500
Peptone	8,00
Glucose	1,00
Bromocresol purple	0,02
9 g/l	pH = 6,6 – 7,0

Taylor Broth Base	
Code number:	DBT20500
Yeast extract	3,000
Glucose	1,000
Bromocresol purple	0,016
4 g/l	pH = 5,9 – 6,3

Moeller Broth, Arginine	
Code number:	DBM20500-AR
Peptone	10,500
Glucose	0,500
L-Arginine	10,000
Pyridoxal	0,005
Bromocresol purple	0,010
Cresol red	0,005
21 g/l	pH = 5,9 – 6,3

Falkow Broth, Arginine	
Code number:	DBF20500-AR
Peptone	8,00
Glucose	1,00
L-Arginine	5,00
Bromocresol purple	0,02
14 g/l	pH = 6,6 – 7,0

Taylor Broth, Arginine	
Code number:	DBT20500-AR
Yeast extract	3,000
Glucose	1,000
L-Arginine	5,000
Bromocresol purple	0,016
9 g/l	pH = 5,9 – 6,3

Moeller Broth, Lysine	
Code number:	DBM20500-LY
Peptone	10,500
Glucose	0,500
L-Lysine	10,000
Pyridoxal	0,005
Bromocresol purple	0,010
Cresol Red	0,005
21 g/l	pH = 5,9 – 6,3

Falkow Broth, Lysine	
Code number:	DBF20500-LY
Peptone	8,00
Glucose	1,00
L-Lysine	5,00
Bromocresol purple	0,02
14 g/l	pH = 6,6 – 7,0

Taylor Broth, Lysine	
Code number:	DBT20500-LY
Yeast extract	3,000
Glucose	1,000
L-Lysine	5,000
Bromocresol purple	0,016
9 g/l	pH = 5,9 – 6,3

Moeller Broth, Ornithine	
Code number:	DBM20500-OR
Peptone	10,500
Dextrose	0,500
L-Ornithine	10,000
Pyridoxal	0,005
Bromocresol purple	0,010
Cresol red	0,005
21 g/l	pH = 5,9 – 6,3

Falkow Broth, Ornithine	
Code number:	DBF20500-OR
Peptone	8,00
Glucose	1,00
L-Ornithine	5,00
Bromocresol purple	0,02
14 g/l	pH = 6,6 – 7,0

Taylor Broth, Ornithine	
Code number:	DBT20500-OR
Yeast extract	3,000
Glucose	1,000
L-Ornithine	5,000
Bromocresol purple	0,016
9 g/l	pH = 5,9 – 6,3

Note: The typical formula can be adjusted to obtain optimal performance.

Prepared media	
Bottled Moeller Broth Base:	100 ml: DBM30100, 500 ml: DBM30500
Bottled Moeller Broth, Arginine:	100 ml: DBM30100-AR, 500 ml: DBM30500-AR
Bottled Moeller Broth, Lysine:	100 ml: DBM30100-LY, 500 ml: DBM30500-LY
Bottled Moeller Broth, Ornithine:	100 ml: DBM30100-OR, 500 ml: DBM30500-OR
Tubed Moeller Broth Base: (covered with paraffin oil)	100 x 12 mm: DBM40002 (2 ml)
Tubed Moeller Broth, Arginine: (covered with paraffin oil)	100 x 12 mm: DBM40002-AR (2 ml)
Tubed Moeller Broth, Lysine: (covered with paraffin oil)	100 x 12 mm: DBM40002-LY (2 ml)
Tubed Moeller Broth, Ornithine: (covered with paraffin oil)	100 x 12 mm: DBM40002-OR (2 ml)
Bottled Falkow Broth Base:	100 ml: DBF30100, 500 ml: DBF30500
Bottled Falkow Broth, Arginine:	100 ml: DBF30100-AR, 500 ml: DBF30500-AR
Bottled Falkow Broth, Lysine:	100 ml: DBF30100-LY, 500 ml: DBF30500-LY
Bottled Falkow Broth, Ornithine:	100 ml: DBF30100-OR, 500 ml: DBF30500-OR
Tubed Falkow Broth Base: (covered with paraffin oil)	100 x 12 mm: DBF40002 (2 ml)
Tubed Falkow Broth, Arginine: (covered with paraffin oil)	100 x 12 mm: DBF40002-AR (2 ml)
Tubed Falkow Broth, Lysine: (covered with paraffin oil)	100 x 12 mm: DBF40002-LY (2 ml)
Tubed Falkow Broth, Ornithine: (covered with paraffin oil)	100 x 12 mm: DBF40002-OR (2 ml)
Bottled Taylor Broth Base:	100 ml: DBT30100, 500 ml: DBT30500
Bottled Taylor Broth, Arginine:	100 ml: DBT30100-AR, 500 ml: DBT30500-AR
Bottled Taylor Broth, Lysine:	100 ml: DBT30100-LY, 500 ml: DBT30500-LY
Bottled Taylor Broth, Ornithine:	100 ml: DBT30100-OR, 500 ml: DBT30500-OR
Tubed Taylor Broth Base:	100 x 12 mm: DBT40002 (2 ml)
Tubed Taylor Broth, Arginine:	100 x 12 mm: DBT40002-AR (2 ml)
Tubed Taylor Broth, Lysine:	100 x 12 mm: DBT40002-LY (2 ml)
Tubed Taylor Broth, Ornithine:	100 x 12 mm: DBT40002-OR (2 ml)
Colour:	Purple
pH (25 °C):	See above

Direction: Dispense the bottled media aseptically into sterile test tubes. After inoculation overlie the tubes aseptically with 4 – 5 mm sterile mineral oil (except Taylor Broth). Media in tubes are ready to use.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature. Store the bottled and tubed media protected from light at room temperature. Use before the expiry date on the label.

Quality control:

Test strains	Incubation temp: 37 °C	**Reactions**	Incubation time: 24 h
Broth bases			
Salmonella typhimurium	ATCC 14028	Positive, violet colour	
Citrobacter freundii	ATCC 8090	Negative, yellow colour	
Broths with arginine			
Pseudomonas aeruginosa	ATCC 27853	Positive, violet colour	
Proteus mirabilis	ATCC 29906	Negative, yellow colour	
Broths with lysine			
Salmonella typhimurium	ATCC 14028	Positive, violet colour	
Citrobacter freundii	ATCC 8090	Negative, yellow colour	
Broths with ornithine			
Proteus mirabilis	ATCC 29906	Positive, violet colour	
Klebsiella pneumoniae	ATCC 13883	Negative, yellow colour	

References: Moeller (1955) Acta. Path. Microbiol. Scand. 36: 158.
Falkow (1958) Amer. J. Clin. Path. 29: 598.
Taylor (1961) Appl. Microbiol. 9: 487.

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