



Chocolate Agar / Thayer Martin

Bi-plate for detection of fastidious organisms from clinical specimens.

DESCRIPTION

Chocolate Agar / Thayer Martin is a ready-to-use plate containing two distinct media used for the isolation and cultivation of fastidious organisms, primarily *Neisseria* species.

Chocolate Agar is a non-selective medium for the cultivation of fastidious bacteria, especially *Neisseria* and *Haemophilus* spp, from a variety of clinical specimens.

Thayer Martin is used for the selective isolation of pathogenic *Neisseria* from specimens with mixed flora of bacteria and fungi.

TYPICAL FORMULA*

Chocolate Agar		Thayer Martin	
Enzymatic Digest of Casein	7.5 g	Enzymatic Digest of Casein	7.5 g
Enzymatic Digest of Animal Tissues	7.5 g	Enzymatic Digest of Animal Tissues	7.5 g
Corn Starch	1.0 g	Corn Starch	1.0 g
Dipotassium Phosphate	4.0 g	Dipotassium Phosphate	4.0 g
Monopotassium Phosphate	1.0 g	Monopotassium Phosphate	1.0 g
Sodium Chloride	5.0 g	Sodium Chloride	5.0 g
Agar	17.0 g	Agar	17.0 g
Horse Blood, defibrinated	50.0 ml	Horse Blood, defibrinated	50.0 ml
Vitalex Growth Supplement	10.0 ml	Vitalex Growth Supplement	10.0 ml
Final pH 7.2 ± 0.2 at 25°C		Vancomycin	1.0 mg
		Colistin Sulfate	3.75 mg
*Formula may be adjusted and/or supplemented as required to meet performance specifications; Ingredients per litre of purified water.		Amphotericin B	0.5 mg
		Trimethoprim	1.5 mg
		Final pH 7.2 ± 0.2 at 25°C	

METHOD PRINCIPLE

Enzymatic digest of casein and enzymatic digest of animal tissues provide amino acids, nitrogen, carbon, vitamins and minerals required for organisms growth. Corn starch neutralizes any toxic metabolites. The phosphates are buffering agents. Sodium Chloride maintains the osmotic balance of the medium.. Agar is the solidifying agent.

Horse blood and Vitalex Growth Supplement enhance recovery of *Haemophilus* and *Neisseria* spp.

Antimicrobial agents in Thayer Martin inhibit contaminating microbial flora providing enhanced growth of gonococci and meningococci.

TEST PROCEDURE

Inoculate the plate by streaking the specimen over the agar surface to obtain isolated colonies.

Incubate at 35 ± 2°C for 24-48 hours in 5-10% CO₂. Some strains may require up to 72 h to produce visible growth.

RESULTS INTERPRETATION

Examine for bacterial growth. Typical colonial morphology is as follows:

Neisseria gonorrhoeae appears as small, grayish-white to colorless mucoid colonies. *N. meningitidis* forms similar colonies to *N. gonorrhoeae*, but larger and blue-gray.

An oxidase test may be performed from the primary medium for presumptive identification.

STORAGE

Store at 2-8°C away from light. Do not use the product beyond its expiry date on the label or if product shows any evidence of contamination or any sign of deterioration.

Avoid quick temperature shifts of plated medium to prevent condensation.

SHELF LIFE

4 months.

QUALITY CONTROL

Appearance of Medium: Opaque, chocolate brown.

Expected Cultural Response:

Control strain		Inoculum	Incubation	Growth on Chocolate Agar	Growth on Thayer Martin
<i>Neisseria gonorrhoeae</i>	ATCC 43069	≤ 100 CFU	24-48 h 35 ± 2°C 5-10% CO ₂	Good	Good
<i>Neisseria meningitidis</i>	ATCC 13090				
<i>Haemophilus influenzae</i>	ATCC 10211				
<i>Escherichia coli</i>	ATCC 25922	10 ⁴ -10 ⁶ CFU			Inhibited
<i>Candida albicans</i>	ATCC 10231				

Please refer to the actual batch related Certificate of Analysis (CoA).

WARNING AND PRECAUTIONS

For *in vitro* diagnostic use. For professional use only. Operators must be trained and have certain experience in the laboratory methods. Please read the instructions carefully before using this product. Reliability of assay results cannot be guaranteed if there are any deviations from the instructions in this document.

Consult the Safety Data Sheet (SDS) for information regarding hazards and safe handling practices.








DISPOSAL OF WASTE

Disposal of waste must be carried out according to national and local regulation in force.

BIBLIOGRAPHY

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2. Murray, P. R., E. J. Baron, J. H. Jorgensen, M. L. Landry, and M. A. Tenover (ed.) Manual of Clinical Microbiology, 9th ed. (2007) ASM Press, Washington, D. C
3. Isenberg, H.D. (ed.). 2004. Clinical microbiology procedures handbook, vol. 1, 2 and 3, 2nd ed. American Society for Microbiology, Washington, D.C.
4. Chapin, C.K., G.V. Doern (1983). J. Clin. Microbiol. 17: 1163-1165.
5. Thayer J.D., R.L. Jackson (1975) Public Health Rep. 82:361.
6. Martin, J.E., Armstrong J.H., Smith P.B. (1974). Appl. Microbiol. 27: 802-805.
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TABLE OF SYMBOLS

LOT Batch code	IVD <i>In vitro</i> Diagnostic Medical Device	 Manufacturer	 Use by	 Fragile, handle with care
REF Catalogue number	 Temperature limitation	 Contains sufficient for <n> tests	 Caution, consult Instruction For Use	 Do not reuse

The product is available in the configurations listed below. There may be additional product ref. numbers as well. For an updated listing of available products, visit liofilchem.com

Product	Format	Packaging	Ref.
Chocolate Agar / Thayer Martin	2-sector 90 mm Plate	20 plates	18703

This IFU document and the SDS are available from the online Support Center:

liofilchem.com/ifu-sds



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