

CTM medium

Medium for the transport and storage of samples.

1/ APPLICATION

The Complete Transport Medium (CTM) is indicated for the transport and storage of clinical samples containing aerobic, anaerobic, and/or fastidious bacteria, between the collection site and the laboratory that will perform the diagnostic tests.

This reagent is an in vitro diagnostic medical device and carries the CE marking.

2/ PRINCIPE

An ideal transport system aims to preserve the viability of all microorganisms present in a sample, while limiting bacterial overgrowth between the time of collection and culturing.

The CTM transport medium (patented) contains a phosphate inorganic buffer to stabilize the pH of the medium, calcium and magnesium to help maintain the permeability of bacterial cells, as well as antioxidants to preserve the viability of anaerobic bacteria¹.

3/ PRESENTATION

Description	Reference	Format
CTM medium	CT2201	100 units / box

Ready-to-use liquid transport and storage medium, provided without swab (swab provided separately).

4/ COMPOSITION

Formule théorique par litre d'eau purifiée :

KCl	0.2 g
CaCl ₂	0.1 g
MgCl ₂	0.1 g
K ₂ HPO ₄	0.2 g
Na ₂ HPO ₄	1.15 g
NaCl	3 g
KOH	0.3 / 0.6 g
Uric acid	0.1 g
L-glutathion	0.1 g
Na ₂ S	0.5 g

pH final : 7.3 ± 0.2 unités pH

5/ STORAGE AND SHELF LIFE

- Store the transport medium tubes in a dry place, at a temperature between 2°C and 25°C, in their original packaging until use.
- Do not freeze or overheat.
- The tubes can be used until the expiration date indicated on the tube.

6/ MATERIALS AND REAGENTS NOT PROVIDED

- Sampling materials (swab, ...).
- Isolation materials (loop, rake, inoculation machine).
- Auxiliary media.
- Laboratory materials, reagents, and equipment.
- Bacteriological incubator.

7/ USE PRECAUTIONS

- For in vitro diagnostic use only.
- For professional use only.
- Do not use reagents after their expiration date.
- Do not use reagents if the packaging is damaged.
- Samples, bacterial cultures, and collected products should be considered potentially infectious and handled appropriately.
- Aseptic techniques and usual handling precautions for the bacterial group under study must be followed throughout the process.
- Transport media should not be used as material or manufacturing components.
- The performance presented was obtained with the methodology outlined in these instructions. Any deviation from the methodology may alter the results.

8/ TEST PROCEDURE

Samples without swab:

- In aseptic conditions, remove the cap from the tube, ensuring that the contents are not spilled.
- In aseptic conditions, place the samples (biopsies, stool, etc.) into the CTM medium.
- Replace the cap and ensure that the tube is tightly sealed.
- Label the tube with the patient's first and last name and the sample collection site.

Samples using a swab

- For any superficial sample (e.g., vaginal and urethral swabs, pressure ulcer, superficial wound, scar, eye swab, etc.), a swab can be used.
- Use a sterile flocked fiber swab for the sample collection.
- After sampling, insert the swab into the tube to one-third of the total depth and break the stem at the indicated mark so that the swab is pushed to the bottom of the vial when the cap is screwed on.
- Replace the cap and ensure that the tube is tightly sealed.
- Label the tube with the patient's first and last name and the sample collection site.

9/ TRANSPORT

- After collection, samples should be transported at a temperature between 2°C and 25°C and delivered to the laboratory within a maximum of 48 hours.
- Direct microscopic examination is possible.
- Compatible with molecular biology. Refer to the manufacturer's instructions.

10/ PERFORMANCES

The CTM transport medium has been tested in accordance with CLSI M40-A standard on a panel of organisms, at 4°C and 25°C for 48 hours.

<i>Pseudomonas aeruginosa</i>	ATCC® 27853
<i>Streptococcus pyogenes</i>	ATCC® 19615
<i>Streptococcus pneumoniae</i>	ATCC® 6305
<i>Haemophilus influenzae</i>	ATCC® 10211
<i>Bacteroides fragilis</i>	ATCC® 25285
<i>Peptostreptococcus anaerobius</i>	ATCC® 27337
<i>Fusobacterium nucleatum</i>	ATCC® 25586
<i>Cutibacterium acnes</i>	ATCC® 6919
<i>Prevotella melaninogenica</i>	ATCC® 25845
<i>Neisseria gonorrhoeae</i>	ATCC® 43069
<i>Bordetella pertussis</i>	ATCC® 9797

11/ LIMITATIONS OF THE TEST

- May dilute the sample.
- Local treatments should be avoided within 48 hours prior to sample collection.
- The use of antibiotics should be avoided within 48 hours prior to sample collection.

12/ REMARKS

It is the user's responsibility to consider the nature of the application and the applicable local legislation for implementing quality control (frequency, number of strains, incubation temperature).

13/ DESTRUCTION

Each laboratory is responsible for managing the waste and effluents it produces according to their nature and hazard level, and for ensuring (or having ensured) their treatment and disposal in accordance with applicable regulations.

14/ BIBLIOGRAPHY

1. La Scola B, Khelaifia S, Lagier JC, et al. Aerobic culture of anaerobic bacteria using antioxidants: a preliminary report. Eur J Clin Microbiol Infect Dis 2014 ; 33(10):1781-3
2. Clinical and Laboratory Standards Institute (CLSI) (2007) Quality control of microbiological transport systems; approved standard, M40-A, vol. 23; 2007. No. 34.
3. Cassir N, Belkacemi S, Ballouche M, Khelaifia S, La Scola B. Evaluation of Culture Top transport systems for assessing the bacterial diversity of microbiota by culturomics as compared to a routine transport system. J Med Microbiol. 2021 Oct;70(10). doi: 10.1099/jmm.0.001411. PMID: 34665113.

15/ SYMBOLES UTILISES SUR LES ETIQUETTES

	Reference catalogue
	In vitro diagnostic medical device
	Lot code
	Consult the instructions for use.
	Sufficient content for "n" tests.
	Do not reuse.
	Use by
	Temperature limitations
	Do not use if damaged.
	Manufacturer