Technical Data Sheet

m-ColiBlue24® Broth – 2mL Liquid Media Ampoules
Cat. No. M00PMCB24

This medium is recommended for simultaneous detection of total coliform bacteria and Escherichia coli (E. coli) within 24 hours in water samples.

Mode of Action
m-ColiBlue24® broth is used for monitoring drinking water, wastewater and other types of water using a 24 hour incubation period. An enzymatic indicator in the medium causes non-fecal total coliform colonies grown on the medium to be red, while the E. coli colonies are blue. The selectivity of the enzymatic indicator eliminates the need for confirmation. The low false positive rates allow for the detection of 95% of all E. coli. The medium enhances the growth rate of coliform bacteria. Special inhibitors efficiently minimize the growth of non-coliform bacteria but do not inhibit the growth of stressed organisms.

Application
1. Collect the water sample in a sterile container. Sodium thiosulfate is necessary when the water sample contains a residual disinfectant. The sample should be a 100 ml minimum. Dilution of the sample will be necessary if a high number of bacteria colonies are expected.
2. Invert one m-ColiBlue24® Broth ampoule 2 to 3 times. Open the ampoule. Remove the lid of a petri dish and carefully pour the contents equally onto the absorbent pad.
3. Set up the membrane filtration apparatus. Use sterile forceps to put the membrane filter in the assembly. The grid side is up.
4. Invert the sample / diluted sample for approximately 30 seconds to thoroughly mix the sample.
5. Pour the sample / diluted sample into the funnel. If the volume is less than 20ml, add 10 ml of sterile buffered dilution water to the funnel.
6. Apply the vacuum until the funnel is empty. Then stop the vacuum.
7. Rinse the funnel with 20ml to 30ml of sterile buffered dilution water. Apply the vacuum. Rinse the funnel two more times.
8. Stop the vacuum when the funnel is empty. Remove the funnel from the assembly. Use sterile forceps to lift the membrane filter.
9. Put the membrane filter on the absorbent pad. Let the membrane filter bend and fall equally across the absorbent pad to make sure that the air bubbles are not trapped below the filter.
10. Secure the lid on the petri dish and invert the dish.
11. Incubate the inverted petri dish for 24 hours at 35 +/- 0.5° C.
12. Remove the petri dish from the incubator. Use a microscope to count the number of bacteria colonies on the membrane filter.
13. Interpret and report the results.

Results Reporting
Report the colony density as the number of colonies in 100ml of sample. If there's more than 200 colonies, dilute the sample and use the diluted sample in the test procedure.

Colonies in 100ml = colonies counted / ml of sample x 100**.**

Storage and Shelf Life
The product can be used until the expiry date if the unopened ampoules are stored sealed in the aluminum foil bag at 2 – 10°C.

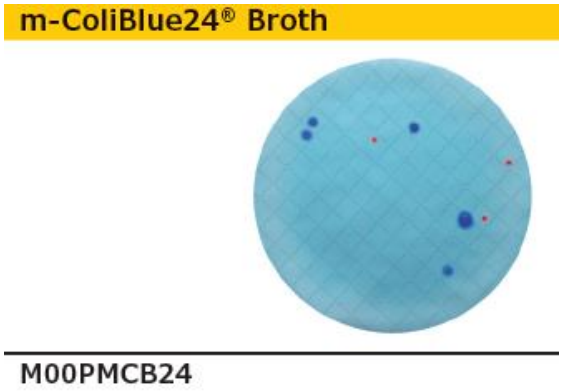
Disposal
Please dispose of used culture medium in accordance with local regulations (e.g. autoclave for 20 min at 121 °C, disinfect, incinerate etc.).

Quality Control

Function	Control Strains	Incubation	Reference Medium	Method of Control	Expected Results
Productivity	*Escherichia coli* ATCC® 25922	24 +/- 2 hours at 35 +/- 0.5° C	Previously validated batch of m-ColiBlue24® Broth	Quantitative	Recovery 80-120% Characteristic colonies
	Enterobacter cloacae ATCC® 23355				Recovery 80-120% Characteristic colonies
	Klebsiella pneumoniae ATCC® 13883				Recovery 80-120% Characteristic colonies
Selectivity	*Pseudomonas aeruginosa* ATCC® 27853			Qualitative	Recovery of Pseudomonas aeruginosa organisms inhibited

Please refer to the actual batch specific certificate of analysis.

Escherichia coli colonies are blue.
Other coliforms are red.
All other colors are non-coliform bacteria.



Ordering Information

Product	Cat. No.	Pack size
m-ColiBlue24® Broth	M00PMCB24	50 x 2 mL plastic ampoules

Literature

Standard Methods for the Examination of Water and Wastewater APHA. 19th Edition, 1995 or current edition.

Microbiological Methods for Monitoring the Environment. Water and Wastes EPA-600/8-78-017. December 1978.

m-ColiBlue24 is a registered trademark and patented product of Hach Company.

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