



Endo-Agar

Version: 07/2022
M&S item numbers: 4040 (25 x 20 ml) and 5030 (4 x 250 ml)
Profile: Glass tubes and polycarbonate bottles
Color: Pink
Storage: Dark and dry at 4 – 12 °C
Shelf life: 8 months after production

Description and application range

Endo-Agar is used for the detection of *Escherichia coli* and other coliform bacteria from water, wastewater and other samples. The formulation is modified acc. to “Standard Methods for the Examination of Water and Wastewater” (1992). Gram-positive bacteria are inhibited by fuchsin and sodium sulfite, whereas gram-negative organisms show good growth. Bacteria that are able to metabolize Lactose develop red to dark red colonies due to the presence of fuchsin. For most of the *E. coli* strains this reaction is so intense that the fuchsin is crystallized giving the typical green metallic sheen. The medium is manufactured and quality tested in compliance with ISO 11133:2014 + Amd. 2:2020 and ISO/DIS 7704 standard.

Typical composition

Enzymatic digest of casein	10.0 g/l
Lactose	10.0 g/l
Di-potassium hydrogenphosphate	2.5 g/l
Sodium sulfite	3.3 g/l
Fuchsin	0.3 g/l
Bacteriological Agar	12.0 g/l

Final pH: 7.4 ± 0.2 at 25 °C

Microbiological quality control

Bacterial contamination

Incubation: aerobically at room temperature for 3 days, specification: no growth

Productivity quantitative analysis

Incubation: aerobically at 36 ± 2 °C for 21 ± 3 h, approx. inoculum: 50 – 120 CFU

Microorganism	Test strain	Specification	Appearance
<i>Escherichia coli</i>	WDCM 00012	$P_R \geq 0.7$	Dark red with green metallic sheen
<i>Klebsiella aerogenes</i>	WDCM 00175	$P_R \geq 0.7$	Red to dark red

P_R productivity rate (recovery rate)



Selectivity qualitative analysis

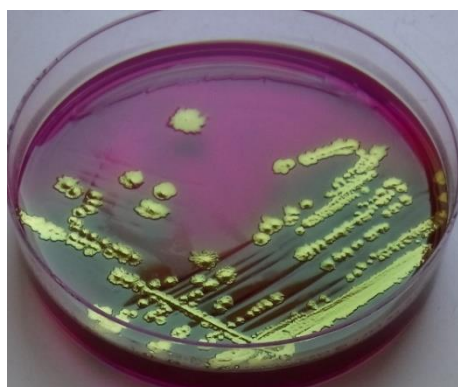
Incubation: aerobically at 36 ± 2 °C for 21 ± 3 h, approx. inoculum: 10,000 – 1,000,000 CFU

Microorganism	Test strain	Specification	Appearance
<i>Enterococcus faecalis</i>	WDCM 00009	Partial inhibition	Reddish without metallic sheen

Specificity qualitative analysis

Incubation: aerobically at 36 ± 2 °C for 21 ± 3 h, approx. inoculum: 80 - 120 CFU

Microorganism	Test strain	Specification	Appearance
<i>Pseudomonas aeruginosa</i>	WDCM 00024	Growth	Beige



Pure culture of *E. coli* after 24 hours at 37 °C