

## Certificate of Analysis

Certificate No: BMDX/COA/P/418/2026

**Product Name:** CLED Agar / MacConkey III Agar

**Product Code:** SP90C1012

**Lot No:** 260428003

**Expiry date:** 04/08/2026

**Date of Analysis:** 28/04/2026 – 30/04/2026

**Parameter Requirement:** Physical, Chemical and Microbiological Analysis

Physical & Chemical Test	Specification	Results
Color	CLED Agar: Blue/Green-colored gel	Passed
	MacConkey III Agar: Dark red colored gel	Passed
pH	CLED Agar: 7.30 ± 0.2	Passed
	MacConkey III Agar: 7.10 ± 0.2	Passed
Hardness	Semi-solid with a firm, smooth, & bounces surface	Passed
Pour Depth/Thickness	CLED Agar: 3.00mm to 3.50mm	Passed
	MacConkey III Agar: 3.00mm to 3.50mm	Passed
Microbiological Test	Specification	Results
<b>CLED Agar:</b>		
<i>Escherichia coli</i> ATCC® 25922	Growth; colonies yellow, medium yellow	Passed
<i>Proteus mirabilis</i> ATCC® 12453	Growth; colonies blue, medium blue-green to blue	Passed
<i>Staphylococcus aureus</i> ATCC® 25923	Growth; colonies small, yellow; medium yellow	Passed
<i>Proteus vulgaris</i> ATCC® 8427	Growth; colonies colorless to blue; swarming inhibited; slight spreading acceptable	Passed
Uninoculated plate	No growth	Passed
<b>MacConkey III Agar:</b>		
<i>Escherichia coli</i> ATCC® 25922	Pink to red growth	Passed
<i>Proteus mirabilis</i> ATCC® 12453	Growth; colorless Inhibition of swarming	Passed
<i>Salmonella Typhimurium</i> ATCC® 14028	Growth; colorless	Passed
<i>Staphylococcus aureus</i> ATCC® 25923	No growth	Passed
<i>Enterococcus faecalis</i> ATCC® 29212	No growth	Passed
Uninoculated plate	No growth	Passed

### Sample statement:

1. Culture media were prepared according to procedure SP-PD-BMDX-02 Production Process Control and SP-PD-BMDX-11 Product Specification.
2. Culture media were kept at temperature conditions 2-8°C.
3. QC Organisms were prepared and followed according to procedure SP-QC-BMDX-07 Quality Control Testing and SP-PD-BMDX-11 Product Specification.



**Result:**

The information given is believed to be correct, all results reported in this certificate relate only to the product in this certificate of analysis according to SP-PD-BMDX-11 Product Specification.

**Sign by:**



**Fairuz Ayuni Binti Abdul Halim**

**QC Executive**

BSc. in Microbiology with Honours

Universiti Putra Malaysia

**Date:** 30/04/2026

