

## Certificate of Analysis

Certificate No: BMDX/COA/P/151/2025

**Product Name:** TCBS/ XLD Agar

**Product Code:** SP90T2011

**Lot No:** 251010003

**Expiry Date:** 16/01/2026

**Date of Analysis:** 13/10/2025 – 14/10/2025

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

| Physical & Chemical Test | Specification                                    | Results |
|--------------------------|--------------------------------------------------|---------|
| Color                    | TCBS: Green slightly opalescent colored gel      | Passed  |
|                          | XLD: Red slightly opalescent colored gel         | Passed  |
| pH                       | TCBS: $8.6 \pm 0.2$                              | Passed  |
|                          | XLD: $7.4 \pm 0.2$                               | Passed  |
| Hardness                 | Semi-solid with a firm, smooth & bounces surface | Passed  |
| Pour Depth/Thickness     | TCBS: 3.00-3.50mm                                | Passed  |
|                          | XLD: 3.00-3.50mm                                 | Passed  |

| Microbiological Test                                                                      | Specification                  | Results |
|-------------------------------------------------------------------------------------------|--------------------------------|---------|
| TCBS Agar                                                                                 |                                |         |
| <i>Vibrio alginolyticus</i> ATCC® 17749                                                   | Growth. Yellow colonies        | Passed  |
| <i>Vibrio parahaemolyticus</i> ATCC® 17802                                                | Growth. Blue Green colonies    | Passed  |
| <i>Escherichia coli</i> ATCC® 25922                                                       | No Growth                      | Passed  |
| Uninoculated plate                                                                        | No Growth                      | Passed  |
| XLD Agar                                                                                  |                                |         |
| <i>Salmonella enterica</i> subsp. <i>enterica</i> serotype <i>Typhimurium</i> ATCC® 14028 | Red colonies, black centers    | Passed  |
| <i>Shigella flexneri</i> ATCC® 12022                                                      | Irregular red colonies         | Passed  |
| <i>Escherichia coli</i> ATCC® 25922                                                       | No growth or yellow colonies   | Passed  |
| <i>Enterococcus faecalis</i> ATCC® 29212                                                  | Inhibition partial to complete | Passed  |
| Uninoculated plate                                                                        | No growth                      | Passed  |

### Sample statement:

- Culture media were prepared according to procedure SP-PD-BMDX-02 Production Process Control and SP-PD-BMDX-11 Product Specification.
- Culture media were kept at temperature conditions 2-8°C.
- 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**  
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**Date:** 14/10/2025

