**Violet Red Bile-MUG Agar（VRBA-MUG）**

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| **Product No.** | **Product Category** | **Specification** |
| HCM128 | Dehydrated Culture Medium | 500g/bottle |

**Intended Use**

For r the detection and enumeration of coliform bacteria, in particular *E. coli*.

**Principle and Interpretation**

Crystal violet and bile salts largely inhibit the growth of Gram-positive accompanying bacterial flora. Lactose- positive colonies show a colour change to red of the pH indicator. E. coli colonies show a fluorescence under UV light.

**Formulation**

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| **Ingredients** | **/liter** |
| Yeast extract | 3.0g |
| Peptone | 7.0g |
| Bile salts | 1.5g |
| Sodium chloride | 5.0g |
| Lactose | 10.0g |
| Neutral red | 0.03g |
| Crystal violet | 0.002g |
| Agar | 15.0g |
| 4-methylumbelliferyl-β-D-glucuronide (MUG) | 0.1g |
| pH7.4±0.2 at 25°C | |

**Preparation**

Suspend 41.6 g in 1 L of distilled or deionized water. Heat with frequent agitation and boil to completely dissolve the powder. Do not autoclave. Cool to 45-50°C and pour into sterile petri dishes.

**Quality Control**

Cultural characteristics observed after incubation at 35-37°C for 18 - 24 hours.

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| **Quality control strains** | **Approx. Inoculum**  **(CFU)** | **Expected Results** | |
| **Recovery** | **Fluorescence** |
| *Escherichia coli* ATCC25922 | 50-200 | Good, PR≥0.7 | Positive |
| *Citrobacter freundii* ATCC43864 | 50-200 | Good, PR≥0.7 | Negative |
| *Staphylococcus aureus* ATCC29212 | >104 | Inhibited, G≤1- | Negative |

**Storage and Shelf Life**

2-30℃，Keep container tightly closed, avoid direct sunlight.

Use before expiry date on the label.

**Precautions**

1. When weighing the dehydrated medium, please wear masks to avoid causing respiratory system discomfort

2. Keep container tightly closed after using to prevent clumping.

**Waste Disposal**

Microbiological contamination was disposed by autoclaving at 121°C for 30 minutes.

**Revision**

On June 14, 2024

**References**

FDA BAM Media M175