

### Media, M17



64

M17 agar is recommended as an improved medium for the growth and enumeration of lactic streptococci and their bacteriophages. It is particularly suitable for growing and maintaining starter cultures for cheese and yoghurt manufacture and is also able to detect streptococcal mutants which are unable to ferment lactose.

M17 broth has been produced in parallel with M17 agar and is a suitable medium for the maintenance of starter cultures because of its considerable buffering capacity and the little effect it has on the subsequent acid-producing ability of these cultures.

#### M17 agar

| Catalogue No  | Quantity, g | Pack qty |
|---------------|-------------|----------|
| <b>CM785B</b> | 500         | 1        |

#### M17 broth

| Catalogue No  | Quantity, g | Pack qty |
|---------------|-------------|----------|
| <b>CM817B</b> | 500         | 1        |

### Media, MacConkey



64

Differential media for the detection, isolation and enumeration of coliforms.

#### MacConkey agar

A differential medium for the detection, isolation and enumeration of coliforms and intestinal pathogens in water, dairy products and biological specimens.

Although principally used for coliforms, this medium may also be employed for the differentiation of other enteric bacteria (including pathogens) and is suitable for the differentiation of *Pasteurella* species.

#### MacConkey agar (without salt)

This medium has the same formulation as MacConkey agar, except that it does not contain added salt and therefore provides a 'low electrolyte medium' on which most *Proteus* species do not spread. For this reason it is particularly useful for urine testing as overgrowth of other organisms is prevented.

#### MacConkey agar No. 2

A modification of the original MacConkey solid medium and is especially useful for the recognition of enterococci, in the presence of coliforms and non-lactose fermenters from water, sewage, food products, etc. Contains bile salts No. 2.

#### MacConkey agar No. 3

A more selective modification of MacConkey medium which is suitable for the detection and enumeration of coliform organisms and also for the detection and isolation of *Salmonella* and *Shigella* species occurring in pathological and food specimens. Due to the inclusion of a specially prepared fraction of bile salts in addition to crystal violet, the medium gives improved differentiation between coliforms and non-lactose fermenting organisms whilst Gram-positive cocci are completely inhibited.

#### MacConkey broth

The advantages of MacConkey broth in the presumptive coliform test are the low proportion of false positive reactions and the fact that most strains of *Escherichia coli* produce a positive reaction within 24 hours. Disadvantages, due to variability of the peptone and bile salts contained in the original medium, have been overcome by large scale production, pooling of batches and careful quality control - including titrimetric standardisation of the bile salts.

The neutral red is pre-tested for the absence of toxic substances before inclusion in the medium.

#### MacConkey broth (purple)

In this broth the neutral red dye is replaced by Bromocresol purple which is less inhibitory. Colour change is from purple to yellow. Each tablet produces 10mL of broth.

#### Sorbitol MacConkey agar

A simple, inexpensive and rapid means of screening for *Escherichia coli* O157. In this formulation the lactose is replaced by sorbitol. *E. coli* O157 does not ferment sorbitol and produces colourless colonies, most strains ferment sorbitol and form pink colonies.

#### Sorbitol MacConkey agar (SMAC) with BCIG

SMAC with BCIG combines two different screening mechanisms for the detection of *Escherichia coli* O157, the failure to ferment sorbitol and the absence of  $\beta$ -glucuronidase activity. *E. coli* O157 will appear as straw coloured colonies, other organisms exhibit distinct blue-green colonies.

### Media, MacConkey



64

#### MUG reagent

MUG is cleaved by  $\beta$ -glucuronidase, a highly specific enzyme of *E. coli*, the product 4-methylumbelliferone fluorescing green/blue at 366nm.

#### Cefixime rhamnose sorbitol MacConkey agar (CR-SMAC agar base)

A selective, differential medium based on sorbitol MacConkey agar with added rhamnose and cefixime. This medium provides a selective base with improved differentiation of *Escherichia coli* O157. Cefixime supplement is required.

#### MacConkey agar (CM7)

A differential medium for the isolation of coliforms and intestinal pathogens in water, dairy products and biological specimens

| Catalogue No  | Quantity | Pack qty |
|---------------|----------|----------|
| <b>CM007B</b> | 500g     | 1        |
| <b>CM007R</b> | 2.5kg    | 1        |

#### MacConkey agar (without salt)

| Catalogue No  | Quantity | Pack qty |
|---------------|----------|----------|
| <b>CM507B</b> | 500g     | 1        |
| <b>CM507R</b> | 2.5kg    | 1        |

#### MacConkey agar No. 2

| Catalogue No  | Quantity, g | Pack qty |
|---------------|-------------|----------|
| <b>CM109B</b> | 500         | 1        |

#### MacConkey agar No. 3 (US formulation)

| Catalogue No  | Quantity, g | Pack qty |
|---------------|-------------|----------|
| <b>CM115B</b> | 500         | 1        |

#### MacConkey broth

| Catalogue No  | Quantity, g | Pack qty |
|---------------|-------------|----------|
| <b>CM005B</b> | 500         | 1        |

#### MacConkey broth purple (MacConkey broth (US formulation)) (CM5a)

A differential medium containing BCP for the detection of coliform organisms in water and milk examinations

| Catalogue No  | Quantity, g | Pack qty |
|---------------|-------------|----------|
| <b>CM505B</b> | 500         | 1        |

#### Sorbitol MacConkey agar

| Catalogue No  | Quantity, g | Pack qty |
|---------------|-------------|----------|
| <b>CM813B</b> | 500         | 1        |

#### Sorbitol MacConkey agar (SMAC) with BCIG

| Catalogue No  | Quantity, g | Pack qty |
|---------------|-------------|----------|
| <b>CM981B</b> | 500         | 1        |

Cefixime-Tellurite selective supplement, vial. A selective supplement for use with sorbitol MacConkey agar for the isolation of *E. coli* O157. Each vial supplements 500mL of medium. Store at 2°C to 8°C

| Catalogue No  | Pack qty |
|---------------|----------|
| <b>SR172E</b> | 10       |

Cefixime-Tellurite selective supplement, vial. Each vial supplements 2L of medium. Store at 2°C to 8°C

| Catalogue No  | Pack qty |
|---------------|----------|
| <b>SR172H</b> | 10       |

Cefixime-Tellurite selective supplement, vial. Each vial supplements 9L of medium. Store at 2°C to 8°C

| Catalogue No  | Pack qty |
|---------------|----------|
| <b>SR172N</b> | 10       |

MUG reagent, vial. Each vial supplements 500mL of medium. Store at 2°C to 8°C

| Catalogue No  | Pack qty |
|---------------|----------|
| <b>BR071E</b> | 10       |

#### Cefixime rhamnose sorbitol MacConkey agar (CR-SMAC agar base)

| Catalogue No   | Quantity, g | Pack qty |
|----------------|-------------|----------|
| <b>CM1005B</b> | 500         | 1        |

Cefixime supplement, vial. Each vial supplements 0.025mg of media. Store at 2°C to 8°C

| Catalogue No     | Pack qty |
|------------------|----------|
| <b>OXSRO191E</b> | 10       |