

## 7985 Novobiocin Supplement

### Intended Use

Novobiocin Supplement is used with culture media as a supplement for the selective enrichment of *Salmonella* spp. and coliforms and *E. coli* and selects against susceptible *Staphylococci* spp.

### Principles of the Procedure

Novobiocin Supplement is a lyophilized supplement which is reconstituted into a solution and is added to various media used to selectively enrich food samples for the isolation of coliforms and *Salmonellae* spp. and decrease the total numbers of susceptible nuisance organisms most commonly found in foods.

For use in:

**7511 MSRV:** Rappaport-Vassiliadis (MSRV) Medium Semisolid Modified is a modification of Rappaport-Vassiliadis enrichment broth for detecting motile *Salmonella* spp. in feces and food products. The semisolid medium allows motility to be detected as halos of growth around the original point of inoculation

**7506 EC Medium, Modified:** EC Medium was developed by Hajna and Perry in an effort to improve the methods for the detection of the coliform group and *E. coli*. This medium consists of a buffered lactose broth with the addition of 0.15% Bile Salts Mixture. Growth of spore-forming bacteria and fecal streptococci were inhibited by the bile salts. EC Medium, Modified with the addition of novobiocin was first described by Okrend and Rose. Okrend and Rose modified EC Medium by reducing the Bile Salts Mixture concentration to 1.12% and adding 20 mg/L of sodium novobiocin. Okrend and Rose et al. reported this formulation, which they called Modified EC & Novobiocin (mEC&N), was beneficial in the enrichment and detection of *E. coli* O157:H7 from meats and poultry, and is currently recommended by the U.S.D.A.

**7167 Tryptic Soy Broth Modified w/ Acid Digest of Casein:** Tryptic Soy Broth, Modified with Acid Digest of Casein is used for the selective enrichment of enterohemorrhagic *E. coli* in foods. Tryptic Soy Broth, Modified with Acid Digest of Casein is used to enrich food samples suspected of having low levels of EHEC during pathogen testing. Conforms to USDA Formulation with Acid Digest of Casein.

### Formula (per vial)

Novobiocin (Sodium salt).....20mg

### Directions

#### **MSRV**

1. Suspend 31.6 g of the medium in one liter of purified water.
2. Heat with frequent agitation and boil for one minute to completely dissolve the medium.
3. **DO NOT AUTOCLAVE.**
4. Cool medium to 45 - 50°C and aseptically add 10 ml of Novobiocin Supplement (7985).
5. Mix well and dispense into petri dishes.

#### **EC Medium, Modified:**

1. Dissolve 36.6 g of the medium in one liter of purified water.
2. Mix thoroughly.
3. Autoclave at 121°C for 15 minutes.
4. Cool to room temperature and add 10 mL of the Novobiocin Supplement (# 7985).
5. Dispense aseptically into sterile tubes containing an inverted fermentation Durham tube.

#### **Tryptic Soy Broth Modified w/ Acid Digest of Casein**

1. Suspend 43 grams of the medium in 1000 mL of purified water.
2. Autoclave at 121°C for 15 minutes.
3. Cool to room temperature and add 10 mL of the Novobiocin Supplement (# 7985).

**Quality Control Specifications**

**Lyophilized Appearance:** Homogenous white dried 'cake', crystalline; may break up with agitation.

**Reconstituted Appearance:** Brilliant to clear colorless solution without a precipitate.

**Reconstitution Procedure**

Reconstitute the vial by aseptically adding 10.0 ml sterile purified water and mix thoroughly.

**Storage**

Store sealed bottle containing the product at 2 - 8°C.

**Expiration**

Refer to expiration date on the label. Expiry applies to the lyophilized supplement in its intact container when stored as directed.

**Limitations of the Procedure**

Discard if lyophilized supplement demonstrates any moisture uptake or appears to have liquefied; discard if reconstituted supplement demonstrates any precipitate.

**Packaging**

**Novobiocin Supplement**

**Code No.                      7985 10 x 10ml**

**Technical Information**

Contact Acumedia Manufacturers, Inc. for Technical Service or questions involving dehydrated culture media preparation or performance at (517)372-9200 or fax us at (517)372-2006.