EC (*Escherichia coli*) Broth Modified

Medium used for the isolation and identification of *Escherichia coli* O157:H7 in food and poultry products.
*Equally use with MFDS (MB-M1388K).

• CONTENTS (Liter)

Tryptone	20.0 g
Bile Salt No.3	1.5 g
Lactose	5.0 g
Dipotassium Phosphate	4.0 g
Monopotassium Phosphate	1.5 g
Sodium Chloride	5.0 g

Final pH = 6.9 ± 0.2 at 25°C

• PROCEDURE

Suspend 37.0 G of powder in 1 L of distilled or deionized water. Heat to boiling until completely dissolved. Sterilize by autoclave at 121°C for 15 minutes. Cool to 45 - 50°C in water bath. Aseptically add 2 vials of Novobiocin supplement (MB-N1821). Mix well. Pour into tubes.

Novobiocin supplement
1 vial contents (each vial is sufficient for 500mL of medium)

Novobiocin	0.01 g

• INTERPRETATION

EC (*Escherichia coli*) Broth Modified is a medium used for the isolation and identification of *Escherichia coli* O157:H7 in food and poultry products. Tryptone provides nutrients for growth of microorganisms. Bile salt No.3 and novobiocin suppress the growth of Gram-positive bacteria. Lactose is the carbohydrate for lactose fermenting microorganisms. Phosphates are the buffering agents. Sodium chloride maintains the osmotic balance.

• TECHNIC

Inoculate the specimen using a sterile needle to the medium. Incubate at 35 ± 2°C for 24 hours. Refer appropriate references for recommended test procedure.

• QUALITY CONTROL FOR USE

Dehydrated medium
Appearance: free-flowing, homogeneous
Color: light beige
Prepared medium
Appearance: slightly opalescent with precipitates
Color: light amber
Incubation conditions: 35 ± 2°C / 24 hours

Microorganism	ATCC	Inoculum CFU	Growth
Escherichia coli O157:H7	NCCP 15739	50-100	good
Enterococcus faecalis	29212	10^3	partially inhibited

• STORE

The powder is very hygroscopic. Store the powder at room temperature, in a dry environment, in its original container tightly closed and use it before the expiry date on the label. Store prepared medium at 2 - 8°C.

• REFERENCES

1. Okrend and Rose. 1989. Isolation and identification of E. coli O157:H7 from meat. USDA Food Safety Inspection Service. Rev. 3 of Laboratory Communication no. 38. E. coli O157:H7. 20 December 1989. U.S. Department of Agriculture, Washington, D.C.
2. OKREND, A.J.G., ROSE, B.E., a. BENNETT, B.: A research not: A screening method for the isolation of E. coli 0157:H7 from ground beef. - J. Food Prot., 53; 249-252 (1990).
3. Refer to the MFDS.

• PACKAGE

Cat. No : MB-E1388 EC (*Escherichia coli*) Broth Modified	500 G

KisanBio Co., Ltd.
YangJaecheon-ro 31-gil-11, SeoCho-Gu, Seoul #06746 Korea
TEL: 82-2-529-2282 FAX: 82-2-529-2284 www.kisanbio.com