

ONPG Broth



Medium used for the identification and determination of microorganisms based on beta-galactosidase.

*Equally use with MFDS (MB-O2210K).

• CONTENTS (Liter)

Peptone	7.5 g
Sodium Chloride	3.75 g
ONPG	1.5 g
Disodium Phosphate	0.355 g
Final pH = 7.5 ± 0.2 at 25°C	

• PROCEDURE

Suspend 13.11 G of powder in 1 L of distilled or deionized water. Heat to boiling until completely dissolved. DO NOT AUTOCLAVE. Cool to 45 - 50°C in water bath. Pour into tubes.

• INTERPRETATION

ONPG (O-nitrophenyl-beta-D-galactopyranoside) Broth is medium used for the identification and determination of microorganisms based on beta-galactosidase. Peptone provides nitrogen, carbon compounds and nutrients. Sodium chloride maintains the osmotic balance. ONPG is a substrate, similar in structure to lactose, as the substrate for beta-galactosidase. Disodium Phosphate is a buffering agent. Positive reaction is indicated by yellow color medium, no color change indicated negative reaction.

• TECHNIC

Inoculate fresh cultured colonies using a sterile loop to the medium. Incubate at 35 ± 2°C for 1 hour up to 24 hours. Refer appropriate references for recommended test procedure.

• QUALITY CONTROL FOR USE

Dehydrated medium

Appearance: free-flowing, homogeneous

Color: beige

Prepared medium

Appearance: clear

Color: light amber

Incubation conditions: 35 ± 2°C / 1 hour up to 24 hours

Microorganism	ATCC	Growth	Characteristics
<i>Escherichia coli</i>	25922	good	yellow color
<i>Proteus mirabilis</i>	25933	good	-

• STORE

The powder is very hygroscopic. Store the powder at 2 - 8°C, 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.

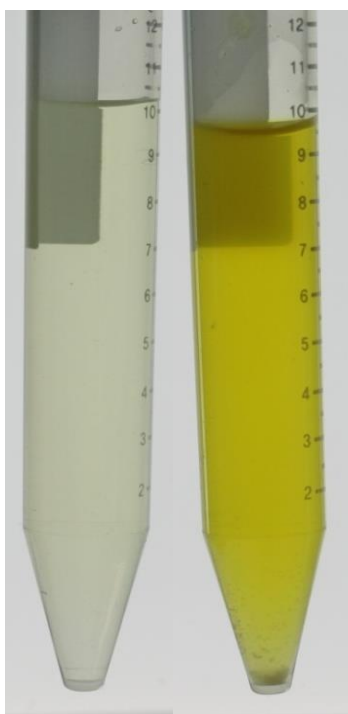
• REFERENCES

1. Negut, M., and G. Hermann. 1975. A comparison of two methods for detecting beta-galactosidase. Public Health Lab. 33:190-193.
2. Refer to the MFDS.

• PACKAGE

Cat. No : MB-O2210 ONPG Broth	500 G
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• MICROBIAL CULTURE IMAGES



None

Escherichia coli
ATCC 25922
 $\geq 10^3$ CFU

Incubation conditions : $35 \pm 2^\circ\text{C}$ / 1 hour up to 24 hours