

DNase Agar with Methyl Green



Medium is used for the identification and determination of deoxyribonuclease activity of microorganisms.

• CONTENTS (Liter)

Tryptose	20.0 g
Deoxyribonucleic Acid	2.0 g
Sodium Chloride	5.0 g
Methyl Green	0.05 g
Agar	15.0 g
Final pH = 7.3 ± 0.2 at 25°C	

• PROCEDURE

Suspend 42.05 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. Mix well. Pour into petri dishes.

• INTERPRETATION

DNase Agar with Methyl Green is a medium used for the identification and determination of deoxyribonuclease activity of microorganisms. Tryptose provides nitrogen, carbon, vitamins and minerals. DNase producing microorganisms depolymerize the DNA. When DNA is depolymerized, the structure of methyl green is changed resulting in a colorless compound observed by clear zones around DNase-producing colonies. Sodium chloride maintains the osmotic balance. Agar is the solidifying agent.

• TECHNIC

Inoculate the specimen using a sterile loop to the medium. Incubate at 35 ± 2°C for 18 - 24 up to 48 hours. Refer appropriate references for recommended test procedure.

• QUALITY CONTROL FOR USE

Dehydrated medium

Appearance: free-flowing, homogeneous

Color: greenish beige

Prepared medium

Appearance : clear to slightly opalescent

Color: green

Incubation conditions: 35 ± 2°C / 18 - 24 hours up to 48 hours

Microorganism	ATCC	Growth	DNase Activity
<i>Serratia marcescens</i>	8100	good	+ (clear zone)
<i>Staphylococcus aureus</i>	25923	good	+ (clear zone)
<i>Staphylococcus epidermidis</i>	12228	good	-

• 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. Washington. 1985. Laboratory procedures in clinical microbiology, 2nd ed. Springer-Verlag, New York, N.Y.
2. MacFaddin. 1985. Media for isolation-cultivation-identification-maintenance of medical bacteria, vol. 1. Williams & Wilkins, Baltimore, Md.
3. Jeffries, Holtman and Guse. 1957. J. Bacteriol. 73:590.
4. DiSalvo. 1958. Med. Tech. Bull. U.S. Armed Forces Med. J. 9:191.

• PACKAGE

Cat. No : MB-D2156 DNase Agar with Methyl Green	500 G
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