

PRODUCT INFORMATION

D-Nase & Toluidine Blue

Cat. No. D04-103

DNase Test Agar with Toluidine Blue (Deoxyribonuclease Activity) is used to differentiate microorganisms with DNase activity.

DESCRIPTION

DNase Test Agar with Toluidine Blue (Deoxyribonuclease Activity) is used to differentiate microorganisms with DNase activity. This differential medium is especially recommended for the identification of pathogenic Enterobacteria.

Casein peptone and soy peptone provide nitrogen, vitamins, minerals and amino acids essential for growth. Sodium chloride supplies essential electrolytes for transport and osmotic balance. Deoxyribonucleic acid enables the detection of DNase that depolymerize DNA. Bacteriological agar is the solidifying agent. DNase Test Agar with Toluidine Blue contains a metachromatic dye to eliminate the necessity of reagent addition to the agar following incubation. Toluidine blue may be toxic to some gram-positive cocci and, therefore, should be used primarily with Enterobacteriaceae.

FORMULA (g/L)

Peptone mixture	23.1 g	Sodium chloride	5.0 g
Deoxyribonucleic acid	2.0 g	Agar	11.6 g
Magnesium sulfate heptahydrate	0.2 g	Toluidine blue	0.1 g

Final pH: 7.3 ± 0.2 at 25 °C

*Grams per liter may be adjusted or formula supplemented to obtain desired performance.

PREPARATION

Suspend 42,1 grams of the medium in one liter of distilled water. Mix well and dissolve by heating with frequent agitation. Boil for one minute until complete dissolution. Sterilize in autoclave at 121 °C for 15 minutes. Cool to 45-50 °C, mix well and dispense into plates.



QUALITY CONTROL SPECIFICATIONS

1. The powder is homogenous, free flowing and greenish beige.
2. Visually the prepared medium is blue, slightly opalescent, and without rests.
3. Expected cultural response after 48 hours at 35 °C ± 2°C.

ORGANISM	GROWTH	CHARACTERISTIC REACTION
<i>Klebsiella aerogenes</i> ATCC 13048	Good Growth	DNase negative
<i>Serratia marcescens</i> ATCC 14756	Good Growth	DNase positive

STORAGE

Store the sealed bottle containing the dehydrated medium at 2 to 25°C. Once opened and recapped, place the container in a low humidity environment at the same storage temperature. Protect it from moisture and light. The dehydrated medium should be discarded if it is not free flowing or if the color has changed from the original color.