

D2560 DNase Test Agar with Toluidine Blue

DNase Test Agar with Toluidine Blue is recommended for the detection of deoxyribonuclease activity of bacteria and fungi, especially for the identification of pathogenic Staphylococci.

Composition:

Ingredients	Grams/Litre
Tryptose	20.0
Deoxyribonucleic Acid	2.0
Sodium Chloride	5.0
Toluidine Blue	0.1
Agar	15.0
Final pH 7.3 +/- 0.2 at 25°C	

Store prepared media below 8°C, protected from direct light. Store dehydrated powder in a dry place in tightly-sealed containers at 2-25°C.

Appearance: Blue colored, homogeneous, free flowing powder.

Gelling: Firm

Color and Clarity: Blue colored, clear to slightly opalescent gel forms in petri plates.

Directions:

Suspend 42.1 g of DNase Test Agar with Toluidine Blue in 1000 ml of distilled water. Heat with frequent agitation to dissolve the medium completely. Sterilize by autoclaving at 12 to 15 lbs. pressure (118°C to 121°C) for 15 minutes. Cool to 45°C and pour into sterile petri plates.

Principle and Interpretation:

With toluidine blue, DNase Test Agar is used in differentiation and identification of nonpigmented *Serratia* species. Tryptose provides essential nutrients. The DNase depolymerizes the DNA resulting in the production of a bright pink reaction due to the metachromic property of the toluidine blue in the agar. Some strains of staphylococci may be inhibited on DNase Test Agar due to the toluidine blue. Further conformatory tests for identification should be carried out.

Cultural characteristics after 18-24 hours at 35-37°C.

Organisms (ATCC)	Growth	DNase Activity*
<i>Staphylococcus aureus</i> (25923)	+++	+
<i>Staphylococcus epidermidis</i> (12228)	+++	-
<i>Streptococcus pyogenes</i> (19615)	+++	+
<i>Serratia marcescens</i> (8100)	+++	+

* + = A change in color from blue to pink purple around the colony.

References:

1. Weckman and Catlin, J. Bact., 73, 747 (1957)
2. Streitfeld, Hoffmann, Jankow, J. Bact., 84, 77 (1962)

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

