# TMP 034- BLOOD AGAR PLATE W/ GENTAMICIN (5MCG/PLATE)

## INTENDED USE
For selective isolation of *Streptococcus pneumoniae*.

## PRODUCT SUMMARY AND EXPLANATION
Blood agar with gentamicin is an enriched medium, used for the selective isolation of *Streptococcus pneumoniae*. The medium gives increased isolation rates of beta-hemolytic streptococci, other streptococci, Bacteroides, Clostridia and yeasts. This medium also helps in detecting gentamicin resistant gram-negative bacilli that are present in mixed culture.

## COMPOSITION

| Ingredients | Gms / Ltr |
|---|---|
| **Brain Heart infusion, from** | 2.000 |
| **Agar** | 15.000 |
| **Pancreatic Digest of casein** | 13.000 |
| **Sodium chloride** | 5.000 |
| **Yeast Extract** | 5.000 |
| **Gentamicin** | 5 mcg/plate |
| **Sheep blood** | 50.000ml |

## PRINCIPLE
Medium contains highly nutritious Liver extract & Yeast extracts, which provide vitamins, carbohydrates, salts and other organic nitrogen compounds. Sodium chloride provides essential ions and maintains electrolyte balance. Proteose peptone provides additional growth factors in the medium. Agar is a solidifying agent. Blood provides additional growth factors and also serves as basis for determining hemolytic reactions. Gentamicin inhibits other gram-positive bacteria. Isolation of *Streptococcus pneumoniae* from respiratory secretions can be increased by using a 5% sheep blood agar plate supplemented with gentamicin.

## INSTRUCTION FOR USE
Either streak, inoculate or surface spread the test inoculum aseptically on the plate.

## QUALITY CONTROL SPECIFICATIONS

| | | |
|---|---|---|
| **Appearance** | : | Cherry Red colour, opaque gel |
| **Quantity of Medium** | : | 25ml of medium in 90mm plates. |
| **pH (at 25°C)** | : | 7.3 ± 0.2 |
| **Sterility Check** | : | Passes release criteria |

## INTERPRETATION
Cultural response observed after incubation.

| Microorganism | ATCC | Inoculum (CFU/ml) | Growth | Recovery | Incubation Temperature | Incubation Period |
|---|---|---|---|---|---|---|
| *Streptococcus pneumonia* | 6303 | 50-100 | Luxuriant | >=70% | 35-37°C | 18-48 hours |
| **Clostridium sporogenes* | 11437 | 50-100 | Luxuriant | >=70% | 35-37°C | 18-48 hours |
| **Clostridium perfringens* | 13124 | 50-100 | Luxuriant | >=70% | 35-37°C | 18-48 hours |

| | | | | | | |
|---|---|---|---|---|---|---|
| *Streptococcus pyogenes* | 19615 | 50-100 | Luxuriant | >=70% | 35-37°C | 18-48 hours |
| *Staphylococcus aureus* | 25923 | ≥1000 | Inhibited | 0% | 35-37°C | 18-48 hours |
| *Escherichia coli* | 25922 | ≥1000 | Inhibited | 0% | 35-37°C | 18-48 hours |
| *Staphylococcus aureus* | 6538 | ≥1000 | Inhibited | 0% | 35-37°C | 18-48 hours |

* Incubated anaerobically

**PACKAGING:**

Doubled layered packing containing 5 No. of plates with one silica gel desiccant bag packed inside it.

**STORAGE**

On receipt, store the plates at 2-8 °C. Avoid freezing and overheating. Do not open until ready to use. Prepared plates stored in their original sleeve wrapping until just prior to use may be inoculated up to the expiration date and incubated for recommended incubation times. Allow the medium to warm to room temperature before inoculation.

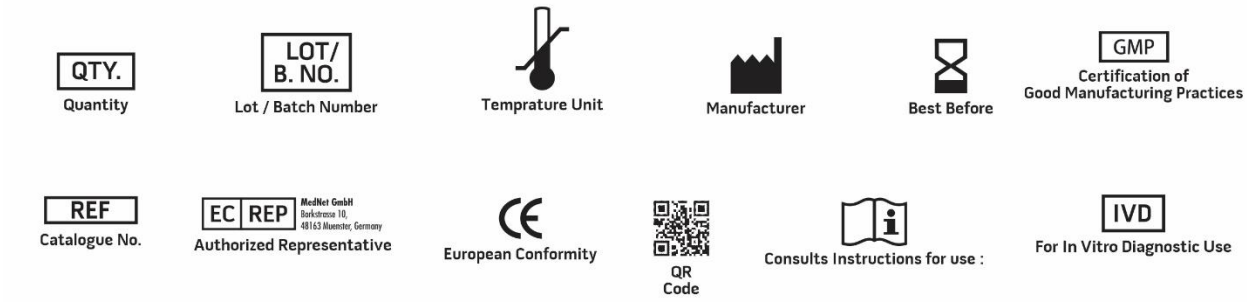
**Product Deterioration:** Do not use plates if they show evidence of microbial contamination, discoloration, drying, cracking or other signs of deterioration.

**DISPOSAL**

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

**REFERENCES**

1. Waterworth, M. Pamela, Brit. J. Exp. Pathol., 36, 186 (1955).
2. Hunter, D. and Kearns M., Brit. Vet. J.,133, 486. (1977).
3. Skirrow, M.B., B.M.J.ii, 9. (1977).




**NOTE:** Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

***For Lab Use Only**

**Revision: 21st March,, 2022**