

## Membranes for microbial Rapid Identification

Membrane Specification: sterile, diameter 70 mm

Storage Temperature: 2-8 °C (in the dark)

### Description:

These membranes are for economical and rapid identification and confirmation of microorganisms in water, food, environmental and clinical samples. They find their application in various sectors in food and dairy industry, water industry, pharmaceutical laboratory testing, cosmetic industry, environmental and sanitary testing, clinical diagnostic etc.

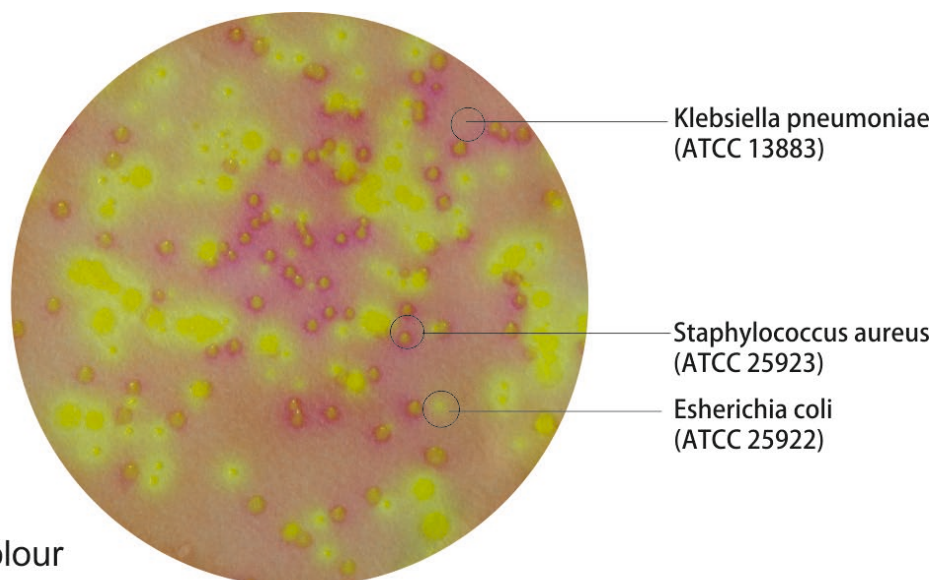
After the routine inoculation and isolation technique the membranes enable the direct identification.

### Directions:

- 1) **Inoculation and Isolation:** Inoculate the organisms from sample on any of general purpose media, nutrient agar, tryptic soy agar, plate count agar etc.  
Adopt any of surface plating methods as; spread plate method, quadrant (four or five) streak pattern or T streak method so as to obtain isolated colonies from inoculums.
- 2) **Incubation:** Incubate at 35-37°C for 18-24 hours.
- 3) **Replication:** For replication technique place the membrane on the surface of agar plate. Perform this step for maximum of 30 seconds to 1 min.. Mark the corresponding orientation of paper.
- 4) **Identification:** Incubate the replicated identification membrane in empty sterile Petri dish at 35-37°C for 1-4 hours or if desired membrane can be placed on dry lid of same plate & incubate in inverted position (\*if lid has moisture wiped it with sterile cotton). Alternately the membrane may be kept for incubation on growth media at 35-37°C.  
Observe for development of color and interpret result

| Carbohydrate Fermentation Membranes                                                                                                                                                                 |                                | For rapid detection of carbohydrate fermenting organisms from mixed flora where fermenting organisms will exhibit yellow colour. |          |         |        |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------|----------|---------|--------|
| Cat #                                                                                                                                                                                               | Carbohydrate                   |                                                                                                                                  |          |         |        |
| 05687                                                                                                                                                                                               | Glucose Fermentation Membrane  |                                                                                                                                  |          |         |        |
| 52284                                                                                                                                                                                               | Lactose Fermentation Membrane  |                                                                                                                                  |          |         |        |
| 39406                                                                                                                                                                                               | Mannitol Fermentation Membrane |                                                                                                                                  |          |         |        |
| 41473                                                                                                                                                                                               | Sucrose Fermentation Membrane  |                                                                                                                                  |          |         |        |
| 92601                                                                                                                                                                                               | Xylose Fermentation Membrane   |                                                                                                                                  |          |         |        |
| <b>Appearance:</b> Pinkish colored membrane                                                                                                                                                         |                                |                                                                                                                                  |          |         |        |
| <b>Cultural Response:</b> Identification observed within 1-4 hours after replication and incubation at 35-37°C, when membrane is placed on an 18 hour old grown culture plate of any general media. |                                |                                                                                                                                  |          |         |        |
| Organisms (ATCC)                                                                                                                                                                                    | Glucose                        | Lactose                                                                                                                          | Mannitol | Sucrose | Xylose |
| <i>Citrobacter freundii</i> (8090)                                                                                                                                                                  | +                              | +                                                                                                                                | +        | +       | +      |
| <i>Enterobacter aerogenes</i> (13048)                                                                                                                                                               | +                              | +                                                                                                                                | +        | +       | +      |
| <i>Escherichia coli</i> (25922)                                                                                                                                                                     | +                              | +                                                                                                                                | +        | -       | +      |
| <i>Klebsiella pneumoniae</i> (13883)                                                                                                                                                                | +                              | +                                                                                                                                | +        | +       | +      |
| <i>Proteus vulgaris</i> (13315)                                                                                                                                                                     | +                              | -                                                                                                                                | -        | +       | +      |
| <i>Salmonella typhimurium</i> (14028)                                                                                                                                                               | +                              | -                                                                                                                                | +        | -       | +      |
| <i>Salmonella typhi</i> (6539)                                                                                                                                                                      | +                              | -                                                                                                                                | +        | -       | +      |
| <i>Serratia marcescens</i> (8100)                                                                                                                                                                   | +                              | -                                                                                                                                | +        | +       |        |
| <i>Shigella flexneri</i> (12022)                                                                                                                                                                    | +                              | -                                                                                                                                | +        | -       | -      |





Development of yellow colour  
indicates positive reaction

### 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.

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