

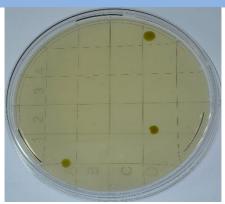
## AG – Tryptic Soya Agar RODAC Plate - INSTRUCTIONS FOR USE

## (Ready Plated Media)

### • INTENDED USE:

RODAC plates (Replicate Organism Detection and Counting) are specialized petri dishes with a convex agar surface designed for surface sampling to detect and quantify viable microorganisms. They are typically used in environments where sanitation monitoring is critical, such as pharmaceutical, healthcare, and food processing facilities.

### • PRINCIPLE:



Tryptic Soya Agar RODAC Plate

The principle behind RODAC (Replicate Organism Detection and Counting) plates is based on the ability of a specialized culture medium to detect and enumerate viable microorganisms present on surfaces. The convex shape of the RODAC plate maximizes surface contact, allowing for efficient collection of microorganisms during surface sampling. This surface contact results in the transfer of microorganisms onto the agar medium, where they can grow into visible colonies, allowing for subsequent enumeration. Many RODAC plates contain neutralizing agents in the culture medium (e.g., lecithin and polysorbate 80) to neutralize any residual disinfectants or cleaning agents on the sampled surface that could inhibit microbial growth. The culture media used in RODAC plates are typically formulated to support the growth of a wide range of microorganisms, including bacteria and fungi, making them useful in a variety of environmental monitoring applications.

### • MATERIALS PROVIDED:

PRODUCT	ТҮРЕ	REF	PACK
AG – Tryptic Soya Agar RODAC Plate - 65mm	Ready Plated Media	AG/TSA/22/06	10 plates in a pack

### • MATERIALS REQUIRED BUT NOT PROVIDED:

Sterile loops, incubator, disinfectant and laboratory equipment as required.

### • SPECIMENS:

- Surfaces in controlled environments such as cleanrooms, pharmaceutical production areas, and laboratories.
- Surfaces in food processing facilities, including processing tables, conveyor belts, and storage areas.
- Equipment such as cutting tools, mixers, and packaging machines.
- Surfaces in hospitals, clinics, and laboratories, such as patient beds, operating tables, doorknobs, and countertops.
- Surfaces in places such as restaurants, public transport, or commercial kitchens where hygiene and contamination levels need to be monitored.

### • TEST PROCEDURE:

- Allow plates to reach room temperature.
- Ensure the agar surface is smooth and moist but not excessively wet.
- Inspect plates to ensure there are no defects or contamination before use.
- Label each RODAC plate with an identification code corresponding to the sample location
- Aseptically remove the lid of the plate. If working with multiple plates, ensure each plate is handled separately
  to prevent cross-contamination.
- Gently press the convex agar surface against the clean, dry surface to be sampled, applying moderate pressure to



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ensure full contact without sliding.

- Immediately replace the lid after sampling to minimize exposure to airborne contaminants.
- After sampling, invert the plates and place them in an incubator at  $35 \pm 2^{\circ}$ C for 48-72 hours.

### • RESULTS INTERPRETATION

- After the incubation period, visually inspect the plates for colony growth.
- Colonies are counted to assess the microbial load on the sampled surface:
- 0–5 CFU: Excellent cleanliness.
- 6–15 CFU: Good cleanliness.
- 16–30 CFU: Moderate cleanliness, review required.
- 31–50 CFU: Poor cleanliness, corrective action needed.
- >50 CFU or TNTC (Too Numerous to Count): Unacceptable, immediate remediation necessary

#### • USER QUALITY CONTROL:

All manufactured lots of the products are released for sale after Quality Control has been performed to check the compliance with the specifications. However, the end user can perform its own Quality Control in accordance with the local applicable regulations, in compliance with accreditation requirements and the experience of the Laboratory. Here below are listed some test strains useful for quality control.

CONTROL STRAINS	INCUBATION	EXPECTED RESULTS
Staphylococcus aureus ATCC 25923	$35 \pm 2$ °C, 24-48 hrs	Good Growth
Escherichia coli ATCC 25922	$35 \pm 2^{\circ}\text{C}, 24-48 \text{ hrs}$	Good Growth

Key: ATCC is a trademark of American Type Culture Collection

### • LIMITATIONS OF THE METHOD:

RODAC plates are limited to sampling flat, non-porous surfaces and may not capture microorganisms from uneven or porous materials effectively.

### • PRECAUTIONS AND WARNINGS:

- This product is for microbiological control and for professional use only; it is to be used by adequately trained and qualified laboratory personnel, observing approved biohazard precautions and aseptic techniques.
- All laboratory specimens should be considered infectious.
- The laboratory area must be controlled to avoid contaminants such as culture medium or microbial agents.
- Sterilize all biohazard waste before disposal. Dispose of the unused medium and the sterilized plates inoculated with samples or microbial strains in accordance with current local legislation.
- The Certificates of Analysis and the Safety Data Sheet of the product are available with AstraGene and can be provided on request.

## • STORAGE CONDITIONS AND SHELF LIFE:

- Upon receipt, store at +2 8°C away from direct light in a cool, dry place. The user is responsible for the storage method (temperature) of the medium.
- If properly stored, the product may be used up to the expiration date. Do not use it beyond the mentioned expired date.

## • SYMBOLS:



AstraGene FZ LLC, Office No. 208 – 209, Dubai Science Park Building, Dubai, United Arab Emirates +971-4-8781222, contact@astragene.com