UPMC Hanover Laboratory

Subject: RapID ANA II System, Remel	Policy #:

PURPOSE:

This document describes the RapID ANA II system for identifying anaerobic bacteria isolated from human clinical specimens.

SCOPE:

This document applies to UPMC Hanover Hospital laboratory.

PRINCIPLE:

The RapID ANA II System is a qualitative micromethod employing conventional and chromogenic substrates for the identification of medically important anaerobic bacteria of human origin.

The tests used in the system are based upon the microbial degradation of specific substrates detected by various indicator systems. The reactions are a combination of conventional tests and single substrate chromogenic tests.

MATERIALS and STORAGE:

- RapID ANA II panels
- RapID Inoculation fluid
- RapID ANA II spot indole
- RapID ANA II reagent
- RapID ANA ID forms

Store the RapID ANA II kit at 2 – 8 ºC. Allow to come to room temperature before use. Store RapID inoculation fluid at room temperature (20 – 25 ºC.)

- McFarland #3 turbidity standard
- Cotton swabs
- Inoculating loops

QUALITY CONTROL:

Performed upon receipt of each new lot or shipment.

Control organisms:

- Clostridium sordelli ATCC 9714
- Parabacteroides distonsonisa ATCC 8503
- Bacteroides uniformis ATCC 8492

SPECIMEN:

- Anaerobic organism grown in pure culture and examined by Gram stain prior to testing.
- Cultures should be less than 72 hours old, preferably 10 to 24 hours old.
- Organisms may be removed from non selective and selective media. Anaerboic Blood agar, Blood agar prepared with Brucella, Columbia or Trypic Soy base, KV agar/
- “Reducible” agars should not be used.
- Kanamycin Bile Esculing or Bacteroides Bile Esculin should not be used.

PROCEDURE:

1. Test organism must be anaerobically grown in pure culture.
2. Using a cotton swab or loop, suspend sufficient growth of a pure culture in RapID inoculation fluid to achieve a turbidity equal to #3 McFarland standard. Mix thoroughly and use within 15 minutes of preparation.
3. Peel back the lid of the panel over the inoculation port by pulling the tab marked “peel to inoculate”.
4. Using a pipet, transfer the entire contents of the inoculation fluid tube into the upper right-hand corner of the panel. Reseal the inoculation port of the panel by pressing the peel back tab back in place.
5. While keeping the panel on a level surface, tilt the panel back away from the test cavities at a 45 ° angle.
6. While tilted back, gently rock the panel from side to side to evenly distribute the inoculum along the rear baffles.
7. While maintaining a level horizontal position, slowly tilt the panel forward toward the reaction cavities until the inoculum flows along the baffles into the reaction cavities. This should evacuate all of the inoculum from the rear portion of the panel.
8. Return the panel to a level position and gently tap to remove any air trapped in the cavities. Examine the cavities to ensure each is bubble free and filled uniformly.
9. Incubate inoculated panels at 35 – 37 ºC in a non CO2 incubator for at least 4 hours but not more than 6 hours.
10. Without the addition of any reagents read and score the cavities (1 through 10) from left to right using the color guide in Table 2 of the package insert.
11. Add 2 drops fo RapID Spot Indole to cavity 10. Do not use another type of Indole reagent.
12. Add 2 drops of RapID ANA II reagent to cavities 3 thorough 9.
13. Allow at least 30 seconds but no more than 2 minutes to color development.
14. Read and record the scores in the appropriate box of the report form.

INTERPRETATION OF RESULTS:

1. Identifications are made using individual test scores from the panel in conjunction with other laboratory information, i.e. Gram stain, appearance on media.
2. The test score is compared to the RapID ANA II System test charts or ERIC, the computerized database available on the web at Remel.com/eric.

LIMITATIONS:

1. RapID ANA II System must be used with pure culture of the test organisms.
2. The system is designed for used with the taxa listed.
3. Specimen source, aerotolerance, Gram stain characteristics and growth on selective media should be considered when using the Rapid ANA II System.

REFERENCES:

Remel Inc. Remel RapID ANA System package insert. August 2023.

REFERENCES:

Site documents or publications, which are not maintained with the SOP. If the document is in response to a regulatory/accreditation requirement, the agency reference, standard, and/or number should be sited.