



TDA Reagent

R036

Intended use

TDA Reagent is used to determine the tryptophan-deaminase activity.

Composition**

Ingredients	-
Ferric chloride	10.0 g
Distilled water	100.0 ml

**Formula adjusted, standardized to suit performance parameters

Directions

1. Add 1-2 drops of TDA Reagent (R036) directly on suspected colony from HiCrome UTI Agar (M1353) or HiCrome UTI Agar, Modified (M1418).
2. Observe for appearance of dark brown colouration around the colony within 10-30 seconds for confirming positive reaction.

Principle And Interpretation

Tryptophan deamination is of reductive type where the 'NH₂' group of tryptophan is removed and released as ammonia and energy, which is utilized by bacteria. The presence of tryptophan deamination activity can be detected by addition of TDA reagent indicated by dark brown colouration.

Type of specimen

The specimen is any isolated colony on primary or subculture plates.

Specimen Collection and Handling

For clinical samples follow appropriate techniques for handling specimens as per established guidelines.

For food and dairy samples, follow appropriate techniques for sample collection and processing as per guidelines.

For water samples, follow appropriate techniques for sample collection, processing as per guidelines and local standards.

After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning and Precautions

In Vitro diagnostic use only. Read the label before opening the container. Wear protective gloves/protective clothing/ eye protection/face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety data sheets.

Limitations

1. Only pure culture of single organism should be used for testing.
2. Tryptophan deaminase forms indole pyruvic acid from tryptophan which produces a brown colour in the presence of ferric ions. Indole positive organisms may produce a brown colour. This is a negative reaction.
3. Test can be evaluated immediately after the addition of the reagent.

Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature

Quality Control

- **Appearance** : Yellow coloured solution.
- **Clarity** : Clear solution without any particles.
- **Cultural Response**: Biochemical identification was carried out by transferring suspected colony from HiCrome UTI Agar, Modified (M1418) plate on filter paper and adding 1-2 drops of TDA Reagent (R036).

Organism	Growth	TDA
<i>Escherichia coli</i> ATCC 25922 (WDCM 00013)	Luxuriant	Negative (no colour change around colony)
<i>Proteus hauseri</i> ATCC 13315	Luxuriant	Positive (dark brown colouration around colony)

Storage and Shelf Life

Store between 10-30°C in tightly closed container and away from bright light. Use before expiry date on label. On opening, product should be properly stored in dry ventilated area protected from extremes of temperature and sources of ignition. Seal the container tightly after use.

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques.

Reference

1. Isenberg, H.D. Clinical Microbiology Procedures Handbook. 2nd Edition. Vol. 2.
2. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015)
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4. Rice E.W., Baird, R.B., Eaton A. D., Clesceri L. S. (Eds.), 2012, Standard Methods for the Examination of Water and Wastewater, 22nd ed., APHA, Washington, D.C.
5. Wehr H. M. and Frank J. H., 2004, Standard Methods for the Microbiological Examination of Dairy Products, 17th Ed., APHA Inc., Washington, D.C.
6. Lapage S., Shelton J. and Mitchell T., 1970, Methods in Microbiology', Norris J. and Ribbons D., (Eds.), Vol. 3A, Academic Press, London.
7. MacFaddin J. F., 2000, Biochemical Tests for Identification of Medical Bacteria, 3rd Ed., Lippincott, Williams and Wilkins, Baltimore.



Storage temperature



Do not use if package is damaged



In vitro diagnostic medical device



CE Marking



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