

# Spot Indole Reagent

**REF** CK9053

## Intended Use

This test detects tryptophanase production which can be used as an aid in the differentiation of the Enterobacterales and other genera.

## Background

The indole test determines the ability of an organism to produce indole from the degradation of the amino acid tryptophan. Indole production is detected with p-dimethylaminocinnamaldehyde, this reagent combines with indole to produce a blue-green colour.

## Precautions

This product is for in-vitro diagnostic use and should be used by properly trained laboratory professionals. Universal precautions should be taken in the handling, processing and discarding of all materials used to perform the test. Do not use reagents after the expiration date shown on the product label has expired.

## Methods

Specimens should be inoculated onto appropriate media to obtain well defined isolated colonies for testing.

### *Filter paper:*

Using a sterile loop or needle smear an isolated colony on to a piece of filter paper. Add one drop of reagent to the smear and observe for colour development. Production of a blue-green colour within 3 minutes is a positive result

### *Swab:*

Touch an isolated colony with the tip of a cotton swab.

Add one drop of reagent to the tip of the swab and observe for colour development.

Production of a blue-green colour within 3 minutes is a positive result

## Results

Positive Reaction – Formation of a blue-green colour within 3 minutes.

Negative Reaction – Formation of a pink colour within 3 minutes.

## Limitations

Organisms to be tested must be taken from a tryptophan containing media (for example blood agar).

Media such as MacConkey Agar should not be used as they contain indicators which could result in the carryover of colour resulting in false positive colour interpretations.

Media containing glucose should not be used as acid production may inhibit indole production.

Only pure cultures should be tested as false positive reactions with mixed cultures (of both indole positive and indole negative) are possible due to the diffusion of indole in the media.

## Quality Control

Test colonies must be cultivated on media with adequate tryptophan content and should be checked with known positive and

negative controls and should undergo a quality control check daily or immediately prior to use.

Bacteria

Positive control-

*Escherichia coli* ATCC 25922

Negative control-

*Proteus mirabilis* ATCC 12453

Anaerobes

Positive control-

*Fusobacterium necrophorum* ATCC 25286

Negative control-

*Bacteroides fragilis* ATCC 25285

### Shelf Life & Storage

The expiry date, storage temperature (2-8<sup>0</sup>C) and storage conditions are indicated on the outer package label.

### Materials provided

Each pack contains 5 dropper bottles, each dropper bottle contains 3ml of Spot Indole Reagent.

### Materials required but not provided

Media and other equipment for subculture.  
Sterile loops, needles or swabs  
Glass slide, petri dish, filter paper.

### Aminopeptidase tests

This reagent can be used to develop aminopeptidase reactions in nitroanilide and naphthylamide based tests.









Nitroanilide tests will turn blue for a positive result while naphthylamide tests will produce a re to dark purple colour for a positive test.

### References

Standards Unit, National Infection Service, PHE. UK SMI, TP19-Indole Test, Issue 4, 03.12.18.

Barrow, G.I. & Feltham, R.K.A. Cowan and Steel's Manual for the Identification of Medical Bacteria. Third edition.

Wadsworth-KTL Anaerobic Bacteriology Manual, Sixth Edition. Jousimies-Somer, H., et al. Star Publishing Company

	Catalogue number
	Batch number
	Use by date
	In-Vitro Diagnostic device
	Contains sufficient for <n> tests
	Temperature storage limitations
	Consult instructions for use
	Manufacturer

Issue	Date	Comments
5	31/07/2020	IFU format revision.

