

## Oxidase Disc

### Intended Use

For oxidase testing.

### Summary and Principle

Certain bacteria possess either cytochrome oxidase or indophenol oxidase (an iron-containing haemoprotein), which catalyzes the transport of electrons from donor compounds (NADH) to electron acceptors (usually oxygen). In the oxidase test, a colourless dye such as N, N-dimethyl-p-phenylenediamine serves as an artificial electron acceptor for the enzyme oxidase. The dye is oxidized to form indophenol blue, a coloured compound. The test is useful in the initial characterization of aerobic gram-negative bacteria of the genera *Aeromonas*, *Plesiomonas*, *Pseudomonas*, *Campylobacter* and *Pasteurella*.

### Directions

1. Oxidase reaction is carried out by touching and spreading 18-48 hour old well isolated colony on the oxidase disc.
2. The reaction is observed within 10-15 seconds at 25-30°C.
3. A change later than 10 seconds or no change at all is considered negative reaction.

### Quality Control

**Appearance:** Blank Filter paper discs of 6mm-10mm diameter.

**Cultural Response:** Typical oxidase reaction given by touching and spreading 18-48 hour culture on oxidase discs with sterile plastic loop within 10-15 seconds.

### Organism (ATCC)

*Escherichia coli* (25922)  
*Pseudomonas aeruginosa* Strain  
Boston 41501 (27853)

### Zone of Inhibition

Negative: No colour change till 60 seconds  
Positive: Deep purplish blue colouration of disc within 15 seconds

### Storage and Stability

Disc in routine use should be stored at 2°C– 8°C. Longer term storage should be at -20°C.

### Performance and Evaluation

Performance of the product is dependent on following parameters as per product label claim:

1. Directions
2. Storage
3. Expiry

### Warranty

This product is designed to perform as described on the label and package insert. The manufacturer disclaims any implied warranty of use and sale for any other purpose.

### References

1. Gordon J. and Mcleod J.W., 1928, J. Path. Bact., 31:185.
2. Gaby W.L and Hadley C., 1957. J. Bact., 74:356.
3. Steel. K.J. 1962. J. Appl. Bact. 25:445.
4. Data on file: Microexpress®, A Division of Tulip Diagnostics (P) Ltd.

### Product Presentation:

Cat No.	Product description	Pack Size
206150110050	Differentiation Discs	Single Vial (1x 50 Disc)

### Disclaimer

Information provided is based on our inhouse technical data on file, it is recommended that user should validate at his end for suitable use of the product.