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Section: Technical Manual	Subject Title: Lap Test	
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LAP TEST

Principle

LAP (Leucine- β -naphthylamide) impregnated disks serve as a substrate for the detection of Leucine aminopeptidase. Following the hydrolysis of the substrate by the enzyme the resulting β -naphthylamine produces a red colour upon the addition of cinnamaldehyde reagent. This test is usually used, in conjunction with other tests, for the identification of streptococci and other catalase negative gram positive cocci.

Reagents

LAP discs
 Cinnamaldehyde reagent (0.01% p-dimethylamino-cinnamaldehyde)
 (disks and reagents are both in LAP kit)
 Glass slide
 Inoculating loop
 Forceps
 Sterile distilled water

Procedure

1. Place a LAP disk onto a glass slide and moisten it with one drop of sterile distilled water.
2. Rub a loopful of the culture onto the moistened disk holding it in place with sterile forceps.
3. Leave at room temperature for 5 minutes.
4. After 5 minutes, add 1 drop of cinnamaldehyde reagent.

Interpretation

Positive: red colour within one minute

Negative: no colour change or slight yellow colour

Quality Control

Test known positive and negative controls each time an unknown is run.

Positive: *E. faecalis* (ATCC 29212)
 Negative: *Leuconostoc* (ATCC 8923)

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Reference

1. Carr-Scarborough Microbiologicals package insert 1991.