

## ESCULIN WEE-TAB

### PRINCIPLE/DISCUSSION:

The ability to hydrolyze esculin is a valuable test to identify an assortment of different organisms, in particular *Streptococci* and *Enterococci*. Hydrolysis of esculin is demonstrated by the release of yellow para-nitrophenol from p-nitrophenol- $\beta$ -D-glucopyranoside.

### ACTIVE INGREDIENTS:

The tablets contain approximately 0.05 mg. of p-nitrophenol- $\beta$ -D-glucopyranoside in a Sodium Chloride and Dicalcium phosphate base.

### MATERIAL REQUIRED:

ESC tablets are sold in tubes ready-to-use, 28 per pack.

The tests require fresh 24 hour growth. Consult a suitable manual for recommended media for the specimen. The following items are required but not provided:

- Inoculating loop
- Distilled water, pH 7.0-7.2
- Disposable pipette

### INSTRUCTIONS:

- (1) Add 3-5 drops of distilled water to the test tube.
- (2) Inoculate heavily with a loopful of organism from a fresh pure 24 hour culture plate or slant. Mix with the loop until the organism is in suspension.
- (3) Incubate aerobically, uncovered, at 35-37C for 2

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- 4) After incubation, observe for yellow color indicating positive esculin reaction.

### STORAGE:

Store tightly covered with desiccant at less than 0C.

### QUALITY CONTROL:

Each lot of tablets should be tested with known positive and negative organisms. Some suggested strains are listed. Dispose of all used material in a manner appropriate for biohazardous material.

	ESC
E. faecalis ATCC29212	+
S. agalactiae ATCC13813	-

### REFERENCES:

- (1) Manual of Clinical Microbiology, Fifth Edition, Chapter 36, Enterobacteriaceae
- (2) Kilian, M and Bulow, P. 1976. Rapid Diagnosis of Enterobacteriaceae, Acta path. microbiol. Scand, Sect B, 84:245-251
- (3) Wadsworth Anaerobic Bacteriology Manual, 5th Edition, 1993, Glucosidase tests, page 152.



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