

PHENYLALANINE DEAMINASE TABLETS

K530
K1530

DISCUSSION:

A few organisms produce the enzyme which deaminates phenylalanine to produce phenylpyruvic acid. The most familiar of these are the *Proteus* and *Providencia* species, *Morganella morganii*, and *Enterobacter agglomerans*. Key Phenylalanine Deaminase Tablets provide the substrate necessary to detect the enzyme. The phenylpyruvic acid end product reacts with ferric chloride to produce a green color.

ACTIVE INGREDIENT:

Each tablet contains phenylalanine hydrochloride and other ingredients necessary for tabletting.

MATERIAL SAFETY DATA:

This product does not contain any material known at this time to be hazardous.

INSTRUCTIONS:

Regular tablets:

- 1) In a small test tube, dissolve 1 tablet in 1 ml. of distilled water.
- 2) Inoculate heavily. One loopful of growth from a culture plate should be enough.
- 3) Incubate at 35-37 degrees for 24 hours.
- 4) Add 1-2 drops of ferric chloride reagent. A green color appearing within 1-5 minutes is a positive result.

Wee-Tabs:

- 1) Add 5 drops of water to the tube containing the tablet.
- 2) Inoculate heavily with a loopful of growth, mixing well.
- 3) Incubate for 4-6 hours @35-37C.
- 4) Add 1 drop of ferric chloride and observe for development of green color.

MATERIALS REQUIRED:

K530 are sold 50 tablets per bottle. K1530 are sold ready to use in tubes, 28 tests per bottle. All tests require fresh 24 hour growth. Consult the Manual of Clinical Microbiology for suggested media. Other materials required but not provided: Ferric chloride solution (available from Key Scientific in 3 ml. and 25 ml. bottles), loop for harvesting colonies, and distilled water

STORAGE:

Store tightly covered at room temperature.

QUALITY CONTROL:

Phenylalanine deaminase tablets should be tested before use with organisms of known reactivity. Key recommends *Proteus vulgaris* ATCC 8427 for positive control and *E. coli* ATCC 25922 for negative. Discard used tests in a manner conforming with accepted laboratory procedures for biohazardous materials.

REFERENCES AND FOOTNOTES:

- (1) Bailey and Scott's Diagnostic Microbiology, 8th Edition, Chapter 27.
- (2) Manual of Clinical Microbiology, 5th Edition, Chapter 36.

SOME EXPECTED REACTIONS:

Citrobacter	-
Enterobacter	-
E. coli	-
Klebsiella	-
Shigella	-
Salmonella	-
Morganella	+
Proteus	+
Providencia	+



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