K1265 GAMMA GLUTAMYL

Many bacteria produce enzymes which can be detected by colorimetric test. Gamma glutamyl transferase (GGT) is detected with a nitroanilide substrate bound to gamma glutamyl, which is colorless. Activity of the enzyme releases the free nitoanilide, which is yellow.

STORAGE:
Store tightly sealed at 2-8C with desiccant provided.

MATERIAL SAFETY DATA:
GGT tablets contain L-gamma-glutamyl-p-nitroanilide. This ingredient in it's pure state may be hazardous if inhaled, ingested or absorbed through the skin. The amount used in the tablet does not present a hazard when used as directed.

QUALITY CONTROL:
The GGT tablet is for invitro diagnostic use only. Observe aseptic techniques when working with clinical specimens and microbiological cultures. Discard used tests in a manner appropriate for biohazardous materials. Each lot of GGT tablets should be tested prior to use with known reaction organisms. Suggested organisms are: Positive -Klebsiella pneumoniae ATCC 13883. Negative -Escherichia coli ATCC 25922

MATERIALS REQUIRED:

Key GGT tablets are provided in packs of 28 tablets in tubes. The tests require fresh growth on plated media appropriate for the specimen. A sterile loop for harvesting and distilled water (neutral pH) are required but not provided.

PROCEDURE:

Place 5 drops of distilled water into test tube provided.

2. Inoculate heavily with a loopful of organism harvested from a fresh pure 24 hour culture. Mix well with loop to produce a suspension.

3. Incubate at 35-37C for 2-4 hours. Positive tests may be read as soon as the yellow color appears. Negatives should be held for the full four hours, but no longer, as false positives may result from longer incubation..

INTERPRETATION OF RESULTS:

The development of a yellow color is a positive test. No color change indicates a negative test. Optional: Add 1 drop of spot indole reagent (sold separately) to confirm reaction: blue/purple = positive, red or yellow = negative.

LIMITATIONS:

Tests done on yellow pigmented colonies may appear positive immediately, but this is the pigmentation and should not be recorded as positive. In this case, the test should be observed for a deepening of the yellow reaction to indicate positive and/or the results should be confirmed with reagent.

REFERENCES:

1. Blasevic, D.J. and G.M. Ederer. 1975. Principals of Biochemical tests in Diagnostic Microbiology. John Wiley & Sons, New York, N.Y.

2. Lennette, E.H., A. Balows, W.J. Haulser, and J.P. Truant (EDS) 1980. Manual of Clinical Microbiology, 3rd edition. American Society for Microbiology.

KEY SCIENTIFIC PRODUCTS, INC
1113 EAST REYNOLDS STREET
STAMFORD, TEXAS 79553
VOICE 800-843-1539
FAX 888-440-4208
WWW.KEYSCIENTIFIC.COM