Microbial Identification & Phenotypic Characterization using VITEK

VITEK is an automated system used for identification of wide variety of aerobic Gram +ve and – ve bacteria, anaerobes and yeasts. It uses advanced colorimetry technology to determine individual biochemical reactions contained in a variety of microbe identification cards. After inoculation with a standardized suspension of the unknown organism, each self-contained card is incubated and read by the instrument's internal optics. Comparison of results to known species specific reactions in the VITEK 2 database yields organism's identity.

Six different types of VITEK cards are used for identification depending on the category of Microorganisms; GN for Gram-negative fermenting and non-fermenting bacilli, GP for Gram-positive cocci and non-spore-forming bacilli, BCL for Gram-positive spore-forming bacilli, YST for Yeasts and yeast-like organisms, CBC for Coryne species and other fastidious organisms and AN for Anaerobic and coryneform bacteria.

Requirements from users:

Pure culture of bacteria on Petri plates, stabs or slants along with completed form and fee (online transfer to NCCS bank account or DD in favour of Director, NCCS).

Data analysis and reporting:

After proper incubation of VITEK cards in VITEK incubator, system will read the cards and generate reports will be sent to customer. Most of the bacterial cultures can be identified using VITEK system. The organisms which are not present in the VITEK database, system generated profile will be send to the customer.

Time taken for analysis:

Normally it takes about 10 working days to complete these tests. However, for slow growing organisms it may take a little longer.

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