## Microbial Identification and Phenotypic characterization of bacteria by BIOLOG

BIOLOG provides automatic Microbial identification system for wide variety of microbes including Gram positive and Gram negative bacteria, yeast, filamentous fungi and anaerobes. The BIOLOG system uses 96 well Microplate format in which all necessary nutrients and biochemicals are prefilled along with Redox tetrazolium dye. Culture suspensions are inoculated in these Microplates, incubated, read and the results are compared with BIOLOG database. The tetrazolium dye changes color as a result of cellular respiration providing a "metabolic fingerprint" which is used to identify the bacterium.

Four different types of BIOLOG Micro Plates are used for identification depending on the category of Microorganisms; GEN III for broad range of Gram-negative and Gram-positive bacteria, YT for yeast, FF for filamentous yeast and Fungi and AN for anaerobic 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, The BIOLOG will be read using BIOLOG reader and system generated report will be sent to the customer. Most of the bacterial cultures can be identified using BIOLOG system. The organisms which are not present in the BIOLOG database, system generated profile will be sent 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.

**Contact:** Service coordinator (mcc@nccs.res.in)

**For more information contact:**

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