



To identify and total bacterial count in liquids in all types of oil, gas and petrochemical, air, food, water and pharmaceutical industries, etc.

MicrobCheck™ TBC in Vial have Agar rich culture medium with a special formulation. Using these vials, counting the total number of aerobic microorganisms in a liquid sample is easily possible. TTC substrate is used in this kit. This substrate is hydrolyzed under the influence of enzymes produced in the aerobic respiration of bacteria and is identified by the color change of the colonies from white to red. Due to the fact that the agar medium has the same color as the colonies, the use of TTC substrate and changing the color of the colonies helps to count the colonies easily. The MicrobCheck™ TBC in Vial test kit is a quick and yet simple way to check medical, food, water, etc. samples.

Test Method

Liquid sampling

Inject 1 ml of the desired sample into the vial using a sterile syringe.

Place the vial horizontally so that the culture medium part is at the bottom.

Wait about 30 seconds and then remove the excess sample from the vial using a syringe.







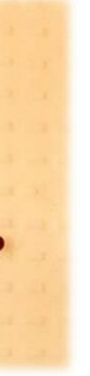
Incubation

Depending on the type of microorganisms under investigation, the incubating temperature will be different. If the amount of environmental contamination is to be checked, it is better to incubate it at a temperature of 25-30 °C. Also, if the micro-organisms in the body are to be investigated, a temperature of 35-37 °C is recommended. Note that if the result is negative after the heating period, continue the incubating for another day.

Interpretation of Results

Compare the growth pattern of the bacteria with the reference images. In this test, the number of microorganisms is reported with CFU (Colony Forming Units). Note that MPN (Most Probable Number) estimates the concentration of bacteria based on the growth in the broth medium.



CFU / ml	10^7	10^6	10^5	10^4	10^3	10^2	10^1
Reference Images							

Quality Control of the MicrobCheck™ TBC in Vial Test Kit

To confirm the quality and performance of the MicrobCheck™ TBC in vial test kit, the specified strains can be cultured and the results can be checked based on the table below. To perform this test, prepare a diluted suspension from the reference bacteria and use them to inoculate the vials .

Organism	Colony size (mm)	Morphology	Color	Note
<i>Salmonella enterica</i>	1.5 – 2.5	Convex and Shiny	Red	-
<i>Pseudomonas aeruginosa</i>	2 – 2.5	Convex and Shiny	Red	-
<i>Streptococcus pyogenes</i>	0.1 - 1	Convex and Shiny	Red	-
<i>Escherichia coli</i>	1.5 – 2.5	Convex and Shiny	Red	-
<i>Bacillus spp.</i>	2 - 6	Diverse	Red	Possibility of spreadation

Best Time to Use

The expiration date of the test kits is 6 months and it is necessary to store them in the refrigerator. It is recommended to avoid frequent temperature changes and storage in the freezer and freezing. In case of improper storage, signs of growth or dehydration may be observed. In this case, do not use vials.

Disposal

Glass vials are completely contaminated after use and bacterial growth. As a result, they need to be autoclaved or burn them in a furnace. If this is not possible, open the vials under the laboratory hood and fill with bleach liquid with a concentration of 5 to 10%. Let it sit overnight and then throw it away.

