

## How to use SensiMedia For *Alicyclobacillus* detection (Screening of *Alicyclobacillus acidoterrestris*)

MicroBio Corporation

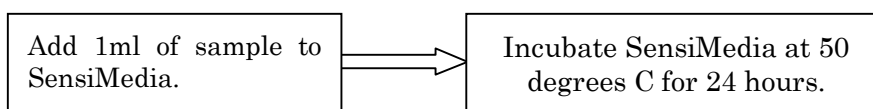
### 1. General Description

This SensiMedia is designed to detect the presence of *Alicyclobacillus* based on the growth characteristics of the microorganism. This SensiMedia is best suitable to screen *Alicyclobacillus* such as *Alicyclobacillus acidoterrestris* that produces guaiacol while growing.

### 2. Liquid Medium

The major material of liquid medium used for this SensiMedia is potato dextrose. Some other nutrients are also added to it for better growth of *Alicyclobacillus*. The pH is adjusted by adding lactic acid to the medium.

### 3. Detection Procedure



#### Add sample

Open a cap of SensiMedia and add 1ml of sample.

Close a cap and place the SensiMedia in an incubator.

#### Incubate

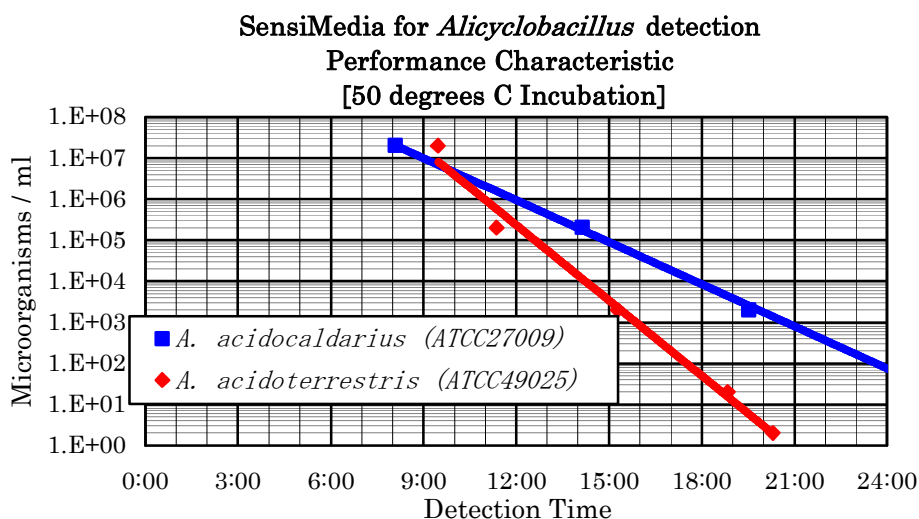
Incubate the SensiMedia at 50 degrees C.



### 4. Detection Criteria

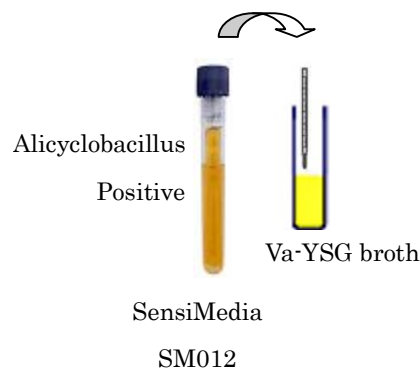
Check the CO<sub>2</sub> sensor 24 hours later after incubation is started. When *Alicyclobacillus*, including *A. acidoterrestris*, is detected, the color of CO<sub>2</sub> sensor turns into yellow.

In this case, perform the verification procedure of guaiacol production.

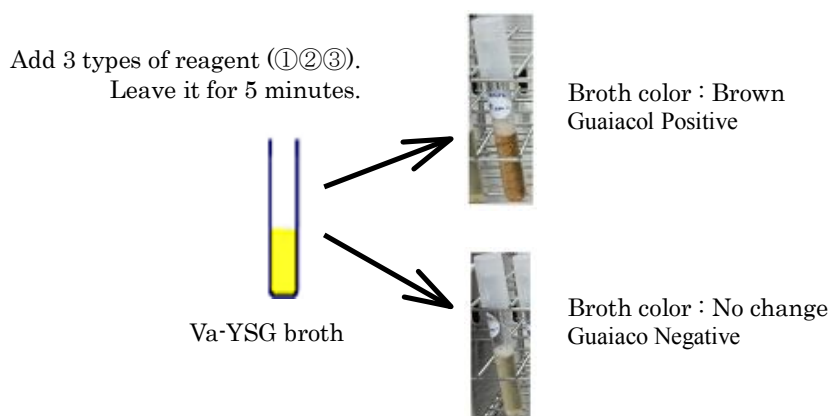


## Verification procedure of guaiacol production

- 1) Open the cap of *Alicyclobacillus* positive SensiMedia SM012, take 1ml of sample and add it to a tube of Va-YSG broth.



- 2) Incubate the Va-YSG broth tube at 45 degrees C for 3 hours.
- 3) Add three types of reagent, ①buffer 1ml, ②H<sub>2</sub>O<sub>2</sub> 20  $\mu$ l and ③peroxidase 20  $\mu$ l to the incubated Va-YSG broth. Leave it for 5 minutes.  
If the color of broth becomes brown, guaiacol production is positive.



Note) Guaiacol detection kit (Cosmo Bio Co., LTD.)