

How to use Salmonella Agar Media (Dehydrated)

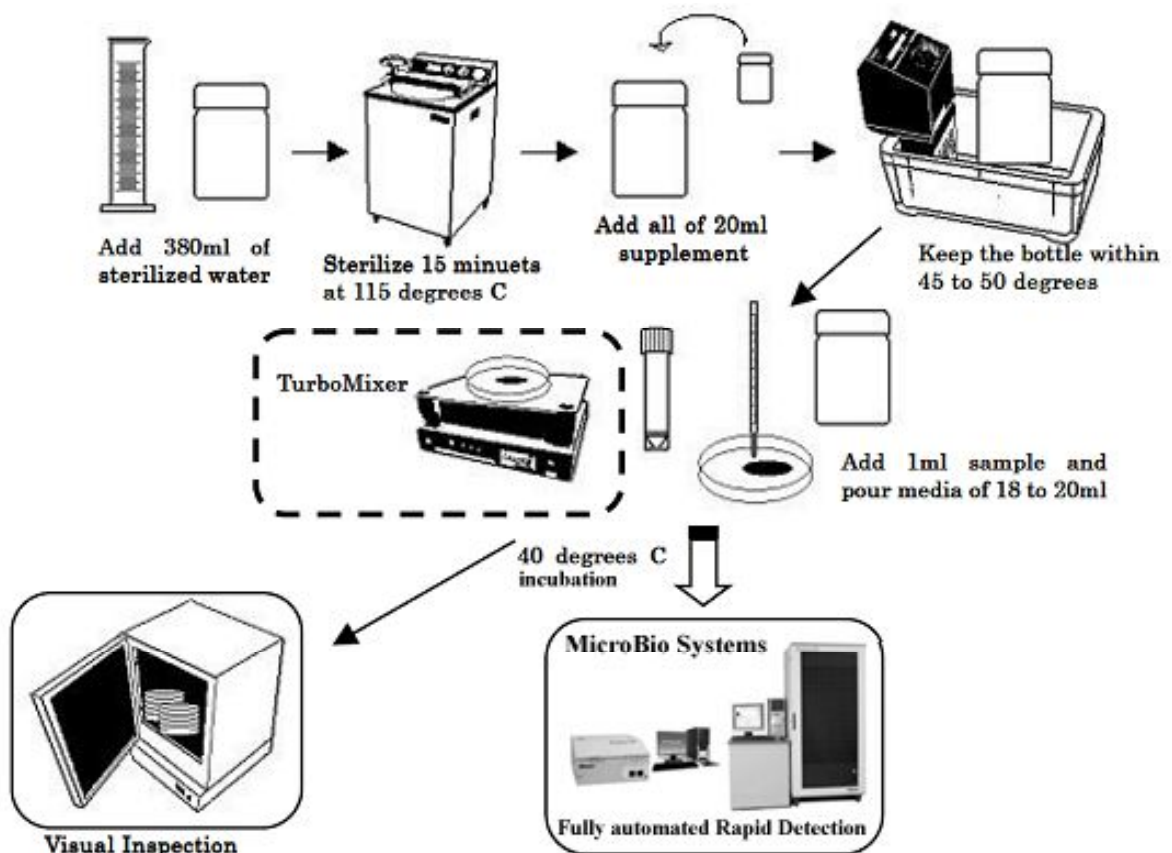
MicroBio Corporation

1. General Description

This dehydrated material for Salmonella agar media is designed to detect Salmonella easily distinguished from other types such as Citrobactor, Escherichia coli, Enterobactor or Klebsiella. When the inoculated media plate is incubated, Salmonella forms black colonies surrounded by red color substrate. Other cell types form transparent colonies surrounded by green color substrate. The growth of Citrobactor is suppressed as possible so that it is not possible to detect colonies even after 24-hour of incubation.

2. Detection Procedure (poured-plate for 1ml sample)

- 2-1 Open the cap of DCM001 bottle and add 380ml of sterilized water to it. Close the cap, shake the bottle and mix the dehydrated material well.
- 2-2 Loosen the cap of DCM001 bottle slightly and place the bottle into an autoclave. Sterilize it for 15 minutes, under the condition of 115 degrees C temperature.
- 2-3 After cooling the bottle down to the temperature lower than 60 degrees C, add all of 20ml supplement into the bottle and mix it gently.
- 2-4 Keep the bottle temperature within 45 to 50 degrees C. Put 1ml sample into a media plate, pour 18 to 20ml of this media from the bottle and mix it. Cool down the plate and solidify the media. When TurboMixer is used, sample is mixed to agar media well.
- 2-5 Incubate the plate at the temperature of 40 degrees C. When MicroBio system is used, fully automated rapid detection and precise colony counts can be achieved.

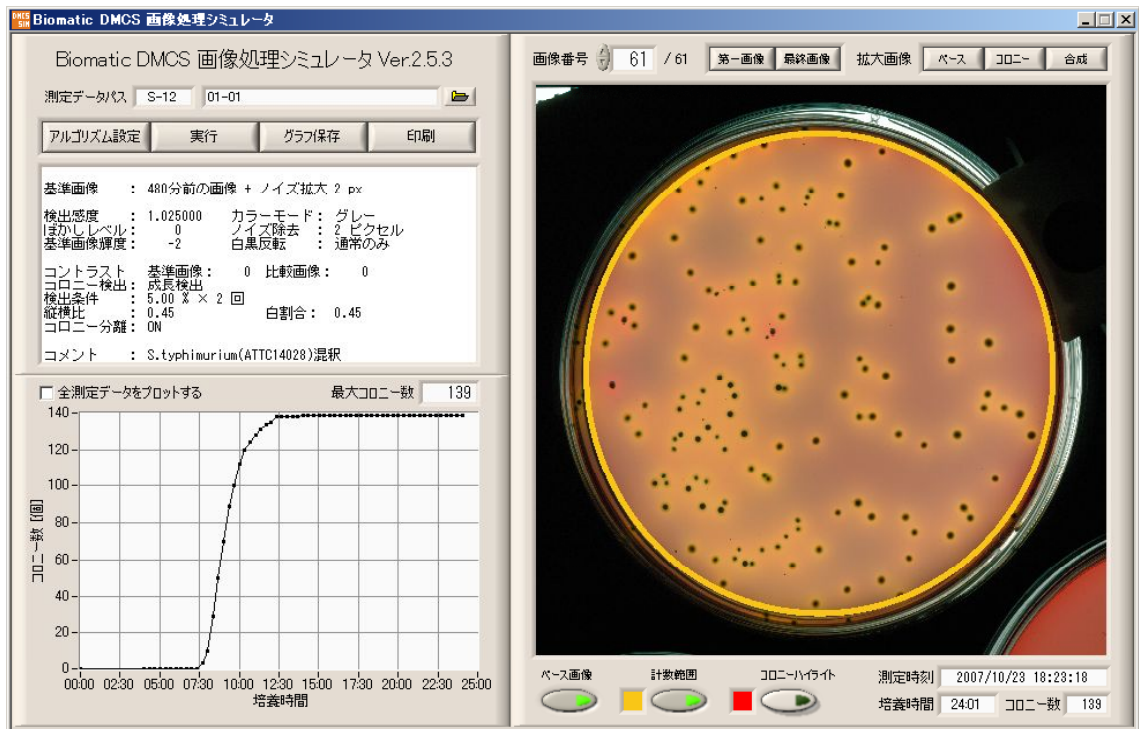


3. Preservation

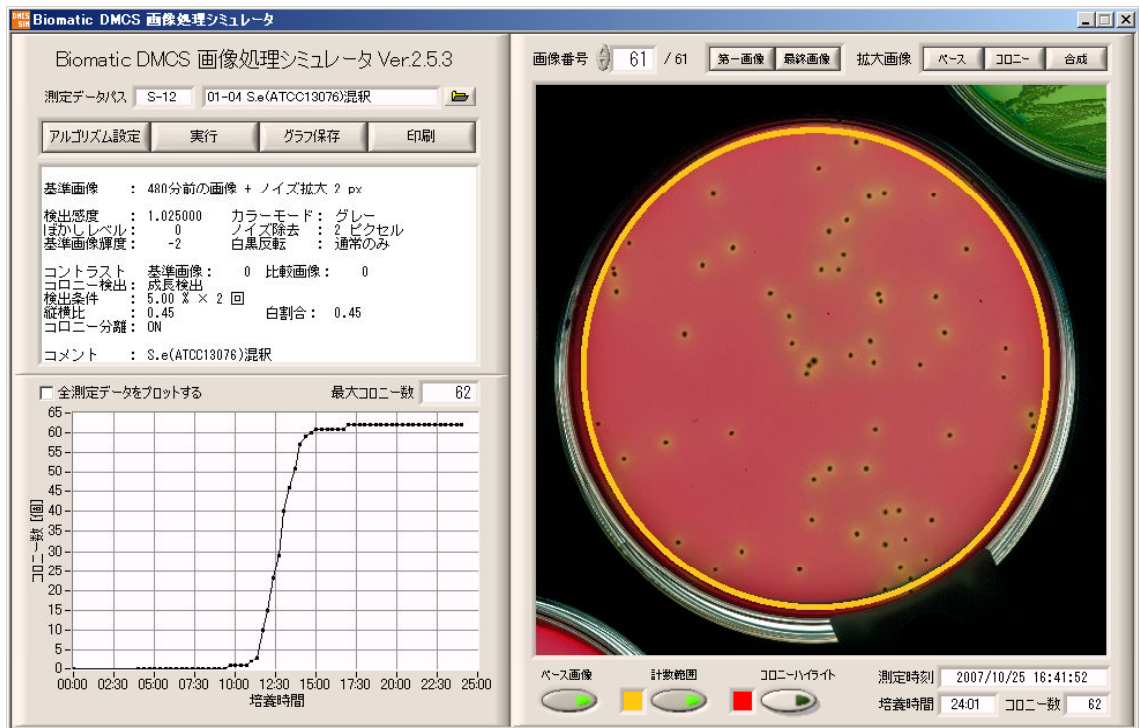
For preservation, keep and store the media in dark place at room temperature.

4. Detection Examples (MicroBio system Data)

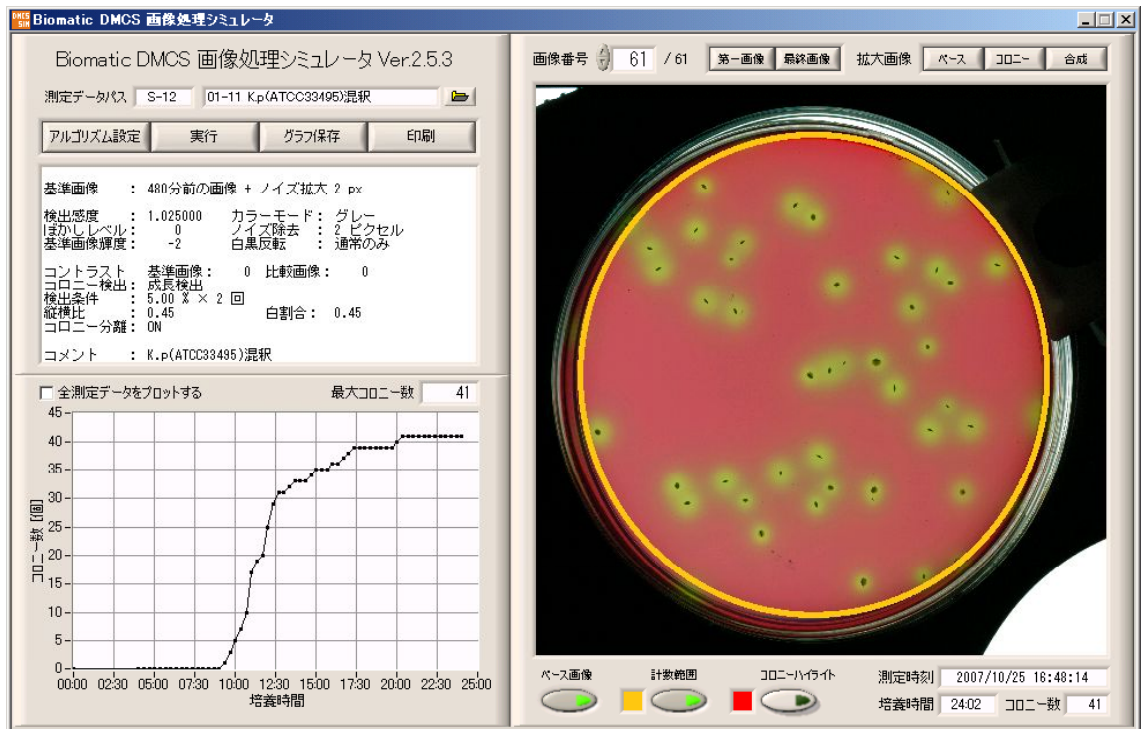
4-1 1ml Sample Poured-plate: *Salmonella typhimurium* (ATTC14028) on DCM001 media [MicroBio system data (13 hour-detection) at 40 degrees C Incubation]



4-2 1ml Sample Poured-plate: *Salmonella enteritidis* (ATTC13076) on DCM001 media [MicroBio system data (16 hour-detection) at 40 degrees C Incubation]



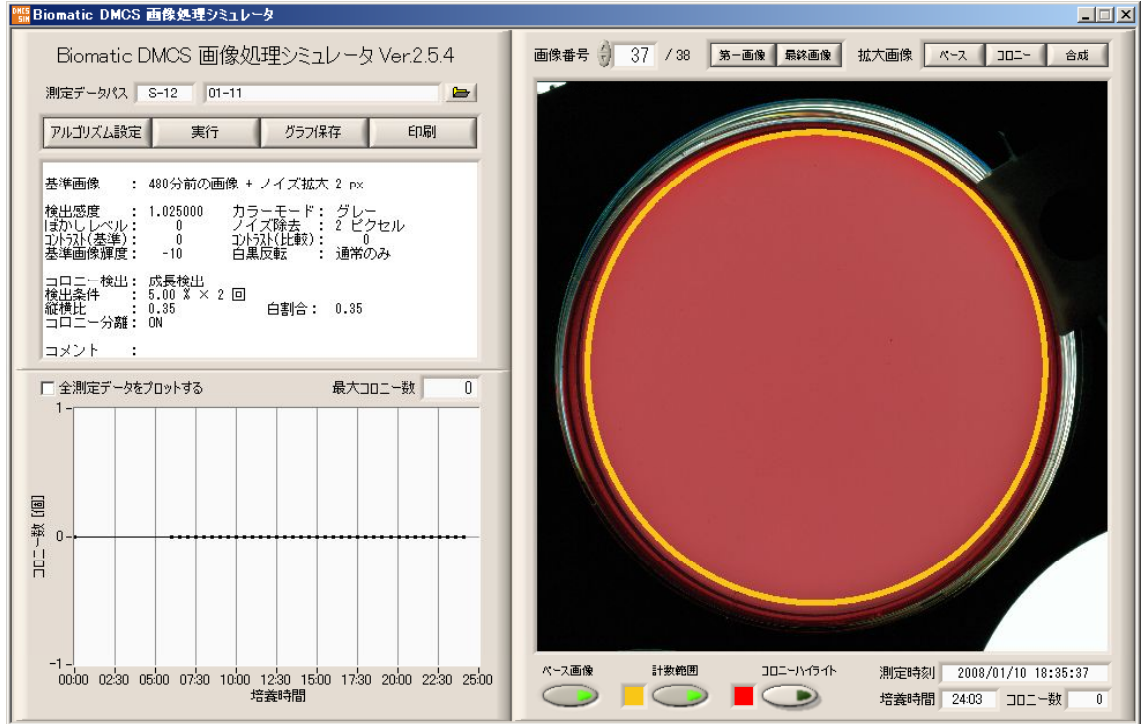
4-3 1ml Sample Poured-plate: *Klebsiella pneumoniae* (ATCC33495) on DCM001 media
 [MicroBio system data (20 hour-detection) at 40 degrees C Incubation]



Reference) Growth suppression effect on *Citrobacter. freundii*

The graphs below show the growth characteristic of *C. freundii*. Using this Salmonella agar media (DCM001), the growth was suppressed and no colony of *C. freundii* was observed even after 24 hours of incubation. Using a Standard Plate Count agar media, 154 cfu was detected in the same 0.1ml sample.

1ml Sample poured-plate: *Citrobacter freundii* (NBRC12681) on DCM001 media
[MicroBio system data (No colonies) even after 24 hour of incubation at 40 degrees C]



1ml Sample poured-plate: *Citrobacter freundii* (NBRC12681) on Standard Plate Count media
[MicroBio system data (154 cfu detected) at 35 degrees C Incubation]

