

# Monascus Broth



Medium used for the cultivation and enumeration of *Monascus* spp.

\* Equally use with Monascus B Broth (MB-M0726).

## • CONTENTS (Liter)

Glucose	30.0 g
Iron Sulfate	0.006 g
Potassium Chloride	0.3 g
Magnesium Sulfate Anhydrous	0.3 g
Ammonium Nitrate	1.2 g
Final pH = 5.5 ± 0.2 at 25°C	

## • PROCEDURE

Suspend 31.81 G of powder in 1 L of distilled or deionized water. Heat to boiling until completely dissolved. Sterilize by autoclave at 121°C for 15 minutes. Cool to 45 - 50°C in water bath. Mix well. Pour into tubes.

## • INTERPRETATION

Monascus Broth is a medium used for the cultivation and enumeration of *Monascus* spp. Glucose is the carbohydrate. Iron sulfate, potassium chloride and magnesium sulfate anhydrous provide ions for the growth of *Monascus* spp. Ammonium nitrate is included as a nitrogen source. The pH of weak acid aids the production of pigment.

## • TECHNIC

Inoculate the specimen using a sterile needle to the medium. Incubate at 25 - 28°C for 7 - 15 days. Refer appropriate references for recommended test procedure.

## • QUALITY CONTROL FOR USE

### Dehydrated medium

Appearance: free-flowing, homogeneous

Color: beige

### Prepared medium

Appearance: slightly opalescent

Color: light amber

Incubation conditions: 25 - 28°C / 7 - 15 days

Microorganism	ATCC	Inoculum CFU	Growth
<i>Monascus pilosus</i>	KCTC (26768)	heavy	good
<i>Monascus purpureus</i>	16361	heavy	good
<i>Monascus ruber</i>	KCTC (6122)	heavy	good

**• STORE**

The powder is very hygroscopic. Store the powder at room temperature, in a dry environment, in its original container tightly closed and use it before the expiry date on the label. Store prepared medium at 2 - 8°C.

**• REFERENCES**

1. Effect of nutrition of *Monascus* sp. on formation of red pigments. *Appl Microbiol Biotechnol* 36:70-75, 1991
2. Stimulation of *Monascus* pigments by intervention of different nitrogen sources. *Global Journal of Biotechnology & Biochemistry* 4 (1):25-28, 2009

**• PACKAGE**

Cat. No : MB-M0725 Monascus Broth	500 G
--------------------------------------	-------