

Orange Serum Agar

Catalog :HB0169-1

Orange Serum Agar is used for isolation and culture of aciduric bacteria in beverage.

Approximate Formula:

Ingredients	gm/liter
Orange Serum	10.0
Yeast Extract	3.0
Pancreatic Digest of Casein	10.0
Dextrose	4.0
Dipotassium Phosphate	2.5
Agar	17.0
Final pH5.5±0.2 at 25°C	

*Adjusted and/or supplemented as required to meet performance criteria.

Directions:

Suspend 46.5g of the medium in 1L of distilled water. Mix thoroughly. Heat with frequent agitation and boil for 1 minute to completely dissolve the powder, dispense, sterilize in an autoclave at 121°C for 10 minutes.

Principle and Interpretation:

Pancreatic Digest of Casein is a source of carbon and nitrogen for general growth requirements. Orange serum provides the acid environment favorable to recovering acid-tolerant microorganisms. Yeast extract supplies B-complex vitamins which stimulate growth. Dextrose is the carbohydrate. Agar is the solidifying agent.

Appearance:

Dehydrated medium is a free-flowing yellowish powder. The prepared medium is a kind of yellowish transparent gel.

Precautions:

This medium is for laboratory use only. Dried medium which is past shelf life, caking or color variation cannot be used.

Storage conditions and Shelf life:

Orange Serum Agar must be stored tightly capped in the original container at 5-30°C. The dehydrated medium has a shelf life of 5 years from date of manufacturing. Prepared medium may be stored, out of direct light at 2-8°C.

Quality control:

Prepare the culture medium as per label directions. Inoculate and incubate at 36±1°C for 24-72 hours.

Microorganism	Strains Number	Inoculum (CFU)	Growth
<i>Lactobacillus acidophilus</i>	ATCC 4356	20-200	Luxuriant
<i>Lactobacillus plantarum</i>	ATCC 8014	20-200	Luxuriant
<i>Lactobacillus rhamnosus</i>	ATCC 7469	20-200	Luxuriant

References:

- Downes and Ito (ed.). 2001. Compendium of methods for the microbiological examination of foods, 4th ed. American Public Health Association, Washington, D.C.
- Hays. 1951. Proc. Fla. State Hortic. Soc. 54:135.
- Murdock, Folinazzo and Troy. 1952. Food Technol. 6:181.