

Nutrient Agar (ISO) (NCM0033)

Intended Use

Nutrient Agar (ISO) is used for the cultivation of a wide variety of microorganisms and is not intended for use in the diagnosis of disease or other conditions in humans.

Description

Formulated to ISO 21528-1:2017 and ISO 21528-2:2017, Nutrient Agar is a general-purpose medium for the cultivation of organisms that are not demanding in their nutritional requirements e.g. organisms that can be isolated from air, water, dust etc. Nutrient Agar is suitable for teaching and demonstration purposes, it is isotonic and can be enriched with biological fluids such as sterile blood and egg yolk.

Typical Formulation

Enzymatic Digest of Animal Tissue	5.0 g/L
Meat Extract	3.0 g/L
Sodium Chloride	5.0 g/L
Agar	15.0 g/L

pH: 7.0 ± 0.2 at 25°C

Formula may be adjusted and/or supplemented as required to meet performance specifications.

Precaution

Refer to SDS

Preparation

1. Suspend 28 grams of the medium in one liter of purified water.
2. Heat with frequent agitation and boil for one minute to completely dissolve the medium.
3. Autoclave at 121°C for 15 minutes.
4. Cool to 45-50°C.

Test Procedure

Inoculate medium with isolated colonies or a loopful of pure culture from broth. Streak for isolation.

Quality Control Specifications

Dehydrated Appearance: Powder is homogeneous, free flowing, and beige.

Prepared Appearance: Prepared medium is clear to trace hazy, light beige and no precipitate.

Expected Cultural Response: Cultural response on Nutrient Agar at 37 ± 1°C & 30 ± 1°C (*Y. enterocolitica*) for 22-26 hours of incubation.

Technical Specification Sheet



Microorganism	Approx. Inoculum (CFU)	Response
<i>Bacillus cereus</i> ATCC® 11778	4Q streak	Good growth
<i>Escherichia coli</i> ATCC® 25922	50-200	> 70%
<i>Escherichia coli</i> ATCC 8739	50-200	> 70%
<i>Salmonella enteritidis</i> ATCC® 13076	50-200	> 70%
<i>Salmonella typhimurium</i> ATCC® 14028	50-200	> 70%
<i>Streptococcus pyogenes</i> ATCC® 19615	4Q streak	Good growth
<i>Streptococcus pneumoniae</i> ATCC® 6305	4Q streak	Good growth
<i>Yersinia enterocolitica</i> ATCC® 9610	50-200	> 70%
<i>Yersinia enterocolitica</i> ATCC® 23715	50-200	> 70%

The organism listed re the minimum that should be used for quality control testing.

Results

Good growth of non-fastidious organisms on Nutrient Agar will appear as translucent colonies.

Expiration

Refer to expiration date stamped on the container. The dehydrated medium should be discarded if not free flowing, or if appearance has changed from the original color. Expiry applies to medium in its intact container when stored as directed.

Limitation of the Procedure

Due to nutritional variation, some strains may be encountered that grow poorly or fail to grow on this medium.

Storage

Store dehydrated culture media at 2 – 30°C away from direct sunlight. Once opened and recapped, place the container in a low humidity environment at the same storage temperature. Protect from moisture and light by keeping container tightly closed.

