YM AGAR (7525)

Intended Use
YM Agar is used for the cultivation of yeasts, molds, and other aciduric organisms in a laboratory setting. YM Agar is not intended for use in the diagnosis of disease or other conditions in humans.

Product Summary and Explanation
YM Agar is prepared according to the formulation published by Wickerham.[1-3] YM Agar was formulated for the selective isolation of yeasts from mixed cultures containing bacteria and molds. Media selectivity may be enhanced through acidification or through addition of selective agents. YM Agar should be sterilized without pH adjustment and sterile acid added to the medium cooled to 45 - 50°C. Acidified YM Agar should not be heated. Antibiotics may be aseptically added to sterile media. Other fungistatic materials may be added to YM Agar to eliminate molds and permit enumeration of yeasts to mixed populations.

Principles of the Procedure
Enzymatic Digest of Gelatin is a nitrogen and amino acid source in YM Agar. Yeast Extract provides trace elements and vitamins. Malt Extract is a source of carbon, protein, and nutrients. Dextrose is an energy source. Agar is the solidifying agent.

Formula / Liter
Enzymatic Digest of Gelatin ..... 5 g
Yeast Extract ..... 3 g
Malt Extract ..... 3 g
Dextrose ..... 10 g
Agar ..... 20 g
Final pH: 6.2 ± 0.2 at 25°C
Formula may be adjusted and/or supplemented as required to meet performance specifications.

Precaution
1. For Laboratory Use Only.

Directions
1. Suspend 41 g 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.

Optional
If desired, acidify YM Agar to pH 3.0 – 4.0 by adding sterile 10% HCl, Tartaric Acid, or 10% Citric Acid. Selective agents, e.g., penicillin (20 units per mL final concentration) or streptomycin (40 micrograms per mL final concentration) may be added to the medium after sterilization using aseptic technique.

Quality Control Specifications
Dehydrated Appearance: Powder is homogeneous, free-flowing, and light beige.

Prepared Appearance: Prepared medium is trace to slightly hazy and pale to light yellow.

Expected Cultural Response: Cultural response on YM Agar incubated aerobically at 25 - 30°C and examined for growth after 2 - 7 days.

Microorganism	Approx. Inoculum (CFU)	Expected Results	
		Response	Reaction
Aspergillus niger ATCC® 16404	Point Inoculation	Growth	White cottony to black powdery
Candida albicans ATCC® 10231	10 - 300	Growth	Off-white to beige pasty
Lactobacillus fermentum ATCC® 9338	10 - 300	Growth	---
Microsporum canis ATCC® 36299	Point Inoculation	Growth	White cottony-powdery
Penicillium roquefortii ATCC® 10110	Point Inoculation	Growth	Grey powdery
Saccharomyces cerevisiae ATCC® 9763	10 - 300	Growth	Off-white to beige

The organisms listed are the minimum that should be used for quality control testing.

Test Procedure

1. Inoculate YM Agar with the appropriate sample for the presence of yeasts, molds, or aciduric microorganisms.
2. Incubate at 30 ± 2°C for 2 to 7 days.

Results

Examine plates for growth. Record YM Agar results as colony forming units (CFU) per volume of sample.

Storage

Store sealed bottle containing the dehydrated medium at 2 - 30°C. Once opened and recapped, place container in a low humidity environment at the same storage temperature. Protect from moisture and light by keeping container tightly closed.

Expiration

Refer to expiration date stamped on 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.

Limitations of the Procedure

1. Due to nutritional variation, some strains may be encountered that grow poorly or fail to grow on this medium.
2. Acidified YM Agar should not be reheated.

Packaging

YM Agar	**Code No.**	**7525A**	**500 g**
		7525B	**2 kg**
		7525C	**10 kg**

References

1. **1951.** U. S. Dept. Agricult. Tech. Bull. No. 1029.
2. **1939.** J. Tropical Med. Hyg. **42:**176.
3. **Jong, S. C., and M. J. Edwards.** 1991. American Type Culture Collection Catalog of filamentous fungi. 18th ed. American Type Collection, Rockville, MD.

Technical Information

Contact Acumedia Manufacturers, Inc. for Technical Service or questions involving dehydrated culture media preparation or performance at (517)372-9200 or fax us at (517)372-2006.

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