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## Certificate of Analysis

**Product:** YPD (YEPD) Broth

**Catalog No.:** 4001-0XX; 4001-022; 4001-021; 4001-036; 4001-065; 4001-034; 4001-032; 4001-031; 4001-075; 4001-042; 4001-052

**Lot No.:** 80782

**YPD Broth:** Molecular Biology Certified Yeast Growth Medium  
Rich Medium for the growth of *S. cerevisiae* in liquid medium.

### Catalog Numbers and Sizes:

Powder	Capsules	Large Capsules	Pouches	Sterile Solution
4001-022	4001-021	4001-036	4001-065	4001-034
4001-032	4001-031		4001-075	
4001-042				
4001-052				

### Formulation and Molecular Biological Specifications of Components:

**Contents Per Liter:** 20 g Peptone-Y , 10 g Yeast Extract, 20 g Dextrose. Small quantities of biological buffers have been added for proper pH adjustment.

Gelatin capsules are produced in a facility that meets the FDA's recent guidance as being derived from BSE-free herds that are born, raised, and slaughtered in the United States.

Gelatin large capsules are derived from raw materials that are not of UK origin or from any other country on the United States of America Department of Agriculture or European Community prohibited list for BSE.

**Reference:** Ronald M. Atlas, (1997) Handbook of Microbiological Media, 2nd Edition L.C. Parks (ed.), CRC Press, NY.

### Recommended Use:

Capsules: Add 50 capsules per liter of purified water.

Powder: Add 50 g of powder per liter of purified water.

Large Capsules: Add 10 large capsules per liter of purified water.

25 g Pouches: Add pouch contents to 500ml of purified water.

50 g Pouches: Add pouch contents to 1 liter of purified water.

For laboratory use only.

### Storage:

Store sterile YPD Broth at ambient temperature (15-30°C). Powder medium is hygroscopic, therefore minimize exposure to air to prolong shelf life of media.

### Shelf life:

In airtight closed container or pouch: 4 years.

### Quality Assurance Information

All Qbiogene products are thoroughly tested to ensure reliable results in the laboratory. The following paragraphs describe Qbiogene's preparation and quality control procedures.

### Media Preparation:

Reagents are tested and chosen for their ability to promote optimum growth of *S. cerevisiae* when combined in YPD Broth

formulations. Chosen reagents are combined in the proper proportions according to the formulation listed above and thoroughly blended for a uniform distribution. A sample of the blended formulation is used to prepare agar medium. The combinations are mixed to dissolve components and then autoclaved at 121°C for 15 minutes.

*Note: Autoclaving at higher temperatures or for longer periods will result in darkening of the sterile medium, (a darker color does not normally affect growth of cells, only the appearance of the sterile medium).*

#### Quality Control Assay:

YPD Broth liquid solution was mixed by swirling to evenly disperse all components and visually inspected after autoclaving for complete dissolution of components. The pH of the medium was tested to insure that the proper specification was attained. Acceptable pH range is 6.2 +/- 0.3 at 25C. Please note that the pH of YPD Broth increases as the temperature of the solution decreases. Refer to the chart below:

Temperature and pH Comparison Chart

C	pH
15	6.3
20	6.3
25	6.4
30	6.4
35	6.5
40	6.5

#### Cell Growth Test:

Duplicate 40ml aliquots of autoclaved YPD Broth from each test lot were inoculated with a control strain of *S. cerevisiae*. The cultures were aerated at 30° C for 48 hours in a shaking incubator. The pH of the cultures was measured and the cells were pelleted at 4000 xg, supernatant discarded, and pellets drained and weighed.

#### Results of Quality Control Assay

	Acceptable Ranges for Test Standard Lot	Small Capsules	Powder/Pouch	Large Capsules
pH and Temperature	5.9-6.5 @ 25°C	N/A	6.45 @ 35.9°C	N/A
Clarity	Clear	N/A	Clear	N/A
pH and Temperature (Harvest)	5.5-6.5 @ 25°C	N/A	5.86 @ 25.6°C	N/A
Pellet Weight	>0.45 g	N/A	0.91g	N/A

#### Conclusions:

This lot of YPD Broth is released for product sales.



03/07/2016 - John Huang, PhD  
QBioGene/MP Biomedicals, LLC  
Quality Control Manager

**MSDS available online at [www.mpbio.com](http://www.mpbio.com)**