

ATCC medium: 1978 YI-S medium

YI Broth (see below).....88.0 ml
Vitamin Mixture 18 (Biofluids* 318).....2.0 ml
Bovine serum (Biofluids* 203) (heat-inactivated)....10.0 ml

To prepare the complete medium, aseptically add Vitamin Mixture 18 and heat-inactivated bovine serum to the YI Broth. Distribute in 13-ml aliquots to 16 x 125 mm screw-capped borosilicate glass test tubes. Store at 4C in the dark with the caps screwed on tightly. Use within 96 hours.

*Biofluids, Inc. is located in Rockville, MD.

YI Broth:

YI Base Stock (see below).....780.0 ml
10X Glucose Buffer Stock (see below).....100.0 ml

Aseptically add 10.0 ml of the 10X Glucose Buffer Stock to 78.0 ml of cooled YI Base Stock. Osmolarity should be 380 milliosmols/kg; adjust by increasing or decreasing NaCl. Broth can be stored at least 6 months at -20C.

YI Base Stock:

NaCl.....1.0 g
Yeast extract*.....30.0 g
L-Cysteine . HCl (Sigma C7880).....1.0 g
Ascorbic acid (Baker B581-05).....0.2 g
Ferric ammonium citrate (Mallinckrodt 0658)...22.8 mg
Distilled water to.....780.0 ml

Dissolve the dry ingredients in 600.0 ml of distilled water in the order indicated. Adjust volume to 780.0 ml with distilled water. Adjust pH to 6.8 with N NaOH. Distribute in 78.0-ml aliquots to 100-ml screw-capped bottles and autoclave at 121C for 15 minutes. Cool to room temperature.

*Note: The formula is sensitive to the type of yeast extract used. ATCC experience indicates that users may have to experiment with different lots of yeast extract.

10X Glucose Buffer Stock:

K₂HPO₄1.0 g
KH₂PO₄0.6 g
Glucose.....10.0 g
Distilled water.....100.0 ml

Filter-sterilize.