

**ATCC medium: 723 Castenholz TYE medium, modified**

*Complete Medium:*

Castenholz Salts 2x (see below)..500.0 ml  
TYE Solution (see below).....100.0 ml  
Agar (if needed).....15.0 g  
Distilled deionized water.....400.0 ml

Combine aseptically. Adjust for final pH 7.6  
If agar is used, add it to the water component.  
Autoclave at 121C for 15 minutes.

*Castenholz Salts, 2X:*

Nitrilotriacetic acid.....0.2 g  
Nitsch's Trace Elements (see below).....2.0 ml  
FeCl<sub>3</sub> solution (0.03%) .....2.0 ml  
CaSO<sub>4</sub> . 2H<sub>2</sub>O .....0.12 g  
MgSO<sub>4</sub> . 7H<sub>2</sub>O .....0.2 g  
NaCl.....0.016 g  
KNO<sub>3</sub> .....0.21 g  
NaNO<sub>3</sub> .....1.4 g  
Na<sub>2</sub>HPO<sub>4</sub> .....0.22 g  
Distilled water.....1.0 L

Adjust pH to 8.2. May be stored at 2-5C for one year. Filter-sterilize before use.

*Nitsch's Trace Elements:*

H<sub>2</sub>SO<sub>4</sub> .....0.5 ml  
MnSO<sub>4</sub> .....2.2 g  
ZnSO<sub>4</sub> .....0.5 g  
H<sub>3</sub>BO<sub>3</sub> .....0.5 g  
CuSO<sub>4</sub> .....0.016 g  
Na<sub>2</sub>MoO<sub>4</sub> .....0.025 g  
CoCl<sub>2</sub> . 6H<sub>2</sub>O .....0.046 g  
Distilled water.....1.0 L

*TYE Solution:*

Tryptone (BD 211705).....20.0 g  
Yeast extract.....20.0 g  
Distilled water.....1.0 L