

## **ATCC Medium: 590 Casamino Acids Medium**

### **Complete Medium**

Casamino Acids (BD 223050).....	1.0 g
Glucose.....	1.0 g
Modified Hutner's Basal Salts (see below).....	20.0 ml
Biotin.....	0.02 mg
DI Water.....	1000 ml

Autoclave at 121°C.

### **Modified Hutner's Basal Salts**

Nitritotriacetic Acid.....	10.0 g
MgSO <sub>4</sub> x 7H <sub>2</sub> O.....	29.7 g
CaCl <sub>2</sub> x 2H <sub>2</sub> O.....	3.34 g
Ammonium molybdate.....	9.25 mg
FeSO <sub>4</sub> x 7H <sub>2</sub> O.....	99.0 mg
Metals "44" (see below).....	50.0 ml
DI Water.....	1000 ml

Dissolve and neutralize the nitritotriacetic acid with KOH (7.3 g); add the other ingredients and adjust the pH to 6.6 - 6.8 before bringing the volume to 1.0 L with distilled water.

### **Metals "44"**

EDTA.....	0.25 g
ZnSO <sub>4</sub> x 7H <sub>2</sub> O.....	1.1 g
FeSO <sub>4</sub> x 7H <sub>2</sub> O.....	0.5 g
MnSO <sub>4</sub> x 7H <sub>2</sub> O.....	0.154 g
CuSO <sub>4</sub> x 5H <sub>2</sub> O.....	0.04 g
Co(NO <sub>3</sub> ) <sub>2</sub> x 6H <sub>2</sub> O.....	0.025 g
Na <sub>2</sub> B <sub>4</sub> O <sub>7</sub> x 10H <sub>2</sub> O.....	0.018 g
DI Water.....	100.0 ml

Initially add a few drops of H<sub>2</sub>SO<sub>4</sub> to the distilled water to retard precipitation.