

Supplementary Table 3 Mega Medium 29 (MM29) recipe

Compound	Final Concentration
Tryptone Peptone	10g/L
Yeast Extract	5g/L
L-Cysteine	0.5g
1M Potassium Phosphate, pH 7.2	100ml/L
TYG Salts Solution	40ml/L
Vitamin K	1 mg/L
Calcium chloride (CaCl ₂) (0.8% stock)	1ml/L
Iron sulfate (FeSO ₄ ·7H ₂ O) (0.4mg/mL stock)	1ml/L
Resazurin (0.25mg/mL stock)	4ml/L
Histidine/Hematin (0.2M/2mM stock)	1ml/L
Tween 80 (25% stock)	2ml/L
Meat Extract	5g/L
Trace mineral supplement (MD-TMS purchased from ATCC)	10ml/L
Vitamin supplement (MD-VS purchased from ATCC)	10ml/L
Acetate	1.7 ml/L

1. Bring final volume to 1L
2. Bring to pH 7 by adding base (e.g. NaOH)
3. Filter sterilize media with a 0.2um filter system (wrapped in foil) and store protected from light at 4°C (wrap in foil)
4. Add glycan carbohydrate source (5 g/L final concentration), as appropriate

TYG salts solution

Components	Concentration
Magnesium sulfate (MgSO ₄ ·7H ₂ O)	0.5 g/L
Sodium bicarbonate (NaHCO ₃)	10.0 g/L
Sodium chloride (NaCl)	2.0 g/L