

Volvox Medium Recipe

Directions

Modification of the original recipe. Suitable for most axenic strains of Volvox and some of Eudorina and Pandorina. Not suitable for xenic cultures. For additional modifications of Volvox Medium, see HEPES-volvox, MES-volvox, P49, and Volvox-Dextrose.

For 1 L Total

1. To approximately 950 mL of dH₂O, add each of the components in the order specified (except vitamins) while stirring continuously.

2. Adjust the pH to 8.0.

3. Bring the total volume to 1 L with dH₂O.

*For 1.5% agar medium add 15 g of agar into the flask; do not mix.

4. Cover and autoclave medium.

5. Allow to cool and add vitamins.

*For agar medium add vitamins, mix, and dispense before agar solidifies.

#	Component	Amount	Stock Solution Concentration	Final Concentration
1	Ca(NO ₃) ₂ ·4H ₂ O (Sigma C 5676)	1 mL/L	11.8 g/100 mL dH ₂ O	0.5 mM
2	MgSO ₄ ·7H ₂ O (Sigma 230391)	1 mL/L	4 g/100 mL dH ₂ O	0.16 mM
3	Na ₂ glycerophosphate·5H ₂ O (Sigma G 6501)	1 mL/L	5 g/100 mL dH ₂ O	0.16 mM
4	KCl (Fisher P 217)	1 mL/L	5 g/100 mL dH ₂ O	0.67 mM
5	Glycylglycine (Sigma G 1002)	10 mL/L	5 g/100 mL dH ₂ O	3.8 mM
6	P-IV Metal Solution	6 mL/L		
7	Vitamin B₁₂	1 mL/L		
8	Biotin Vitamin Solution	1 mL/L		

