

## WORM MEDIA AND SOLUTIONS

### Worm plate media:

<b>NGM AGAR:</b>		
NaCl	3g	
Bacto-Peptone	2.5g	For rich NGM: 7.5g (supports long-term bacterial growth, less burrowing)
agar	17g - 21 g	
<ul style="list-style-type: none"><li>• autoclave in 1-liter dH<sub>2</sub>O</li><li>• Cool to 55 degrees C, and add (using sterile technique and swirling): 1 mL cholesterol (5 mg/mL in ethanol) 1 mL 1 M CaCl<sub>2</sub> 1 mL 1 M MgSO<sub>4</sub> 25 mL 1 M KH<sub>2</sub>PO<sub>4</sub>, pH 6.0</li></ul> <p>Pour plates about half-full, and flame the agar surface to remove air bubbles (or worms will burrow). Let dry at least one day prior to seeding with OP50 E. coli.</p>		

### Worm solutions:

<b>0.5M CaCl<sub>2</sub></b>		
	1 liter:	
CaCl <sub>2</sub> •2H <sub>2</sub> O	73.5g	
<ul style="list-style-type: none"><li>•Dissolve in ~900ml ddH<sub>2</sub>O and bring final volume to 1 liter.</li><li>•Aliquot into 100ml bottles and autoclave.</li></ul>		
<b>Kcitrate pH 6.0</b>		
	1 liter:	
Citric acid, monohydrate	21.02g	
<ul style="list-style-type: none"><li>•Dissolve in 80 ml and adjust pH to 6.0 with solid KOH (~17g) before bringing up to volume.</li><li>•Aliquot into 100ml bottles and autoclave.</li></ul>		
<b>1M KH<sub>2</sub>PO<sub>4</sub></b>		
	1 liter:	4 liter
KH <sub>2</sub> PO <sub>4</sub>	136.1g	544.4g
<ul style="list-style-type: none"><li>•For 1 liter: Add 800ml ddH<sub>2</sub>O and adjust pH to 6.0 with solid KOH (~10g) before bringing up to final volume (scale 4x for 4 liter).</li><li>•Aliquot and autoclave.</li></ul>		
<b>M9 minimal medium:</b>		
	1 liter:	4 liter:
Na <sub>2</sub> HPO <sub>4</sub>	5.8g	23.2g
KH <sub>2</sub> PO <sub>4</sub>	3g	12g
NaCl	0.5g	2g
NH <sub>4</sub> Cl	1g	4g

<ul style="list-style-type: none"> <li>•Dissolve in ddH<sub>2</sub>O and bring final volume to 1 liter/4 liter.</li> <li>•Aliquot into 500ml bottles and autoclave.</li> </ul>		
<b>1M MgSO<sub>4</sub></b>		
	1 liter:	
MgSO <sub>4</sub> •7H <sub>2</sub> O	246.5g	
<ul style="list-style-type: none"> <li>•Dissolve in ~800ml ddH<sub>2</sub>O and bring final volume to 1 liter.</li> <li>•Aliquot into 100ml bottles and autoclave.</li> </ul>		
<b>S-BASAL:</b>		
	1 liter:	
NaCl	5.9 g	
1 M KH <sub>2</sub> PO <sub>4</sub> pH 6.0	50 mL	
cholesterol (5 mg/mL in ethanol)	1 mL	
<ul style="list-style-type: none"> <li>•Dissolve in ~800ml ddH<sub>2</sub>O and bring final volume to 1 liter.</li> <li>•Aliquot into 100ml bottles and autoclave.</li> </ul>		