

Supplement 1

Table S1.1: Essential and non-essential amino acid stock solutions.

Amino acid	(g/200 ml)
Essential amino acid stock solution	
F (L-phenylalanine)	3.03
H (L-histidine)	2.24
K (L-lysine)	5.74
M (L-methionine)	1.12
R (L-arginine)	4.7
T (L-threonine)	4.28
V (L-valine)	4.42
W (L-tryptophan)	1.45
Non-essential amino acid stock solution	
A (L-alanine)	5.25
D (L-aspartate)	2.78
G (glycine)	3.58
N (L-asparagine)	2.78
P (L-proline)	1.86
Q (L-glutamine)	6.02
S (L-serine)	2.51

Table S1.2: Recipe for 200ml of protein solution

			Total volume 200ml
	L-ile	Powder	348mg
	L-leu	Powder	492mg
	L-tyr	Powder	252mg
	cholesterol	20mg/ml in EtOH	3ml
	CaCl ₂	1000x	200ul
	MgSO ₄	1000x	200ul
	CuSO ₄	1000x	200ul
	FeSO ₄	1000x	200ul
	MnCl ₂	1000x	200ul
	ZnSO ₄	1000x	200ul
	H ₂ O		Up to 50ml
Total volume before autoclaving			50 ml
	buffer	10x acetate buffer base	20ml
	nucl/lipid soln	125x stock	1.6ml
	Yaa solutions	essential amino acid stock solution (EAA)	18.154ml
		non essential amino acid stock solution (NEAA)	18.154ml
		Na glutamate solution (100mg/ml)	5.464ml
		Cys solution (50mg/ml)	1.584ml
	Vitamin stock	47.6x stock	4.2ml
	folic acid stock	1000x stock	200ul
	Propionic acid		1.2ml
	Nipagin	100 g/l stock in 95% EtOH	3ml
Make to total volume of 200ml with H₂O			

Table S1.3: Recipe for 200ml of carbohydrate solution

			Total volume 200ml
	sucrose	To match protein 1:1	6.5g
	cholesterol	20mg/ml in EtOH	3ml
	CaCl ₂	1000x	200ul
	MgSO ₄	1000x	200ul
	CuSO ₄	1000x	200ul
	FeSO ₄	1000x	200ul
	MnCl ₂	1000x	200ul
	ZnSO ₄	1000x	200ul
	H ₂ O		Up to 50ml
Total volume before autoclaving			50ml
	buffer	10x acetate buffer base	20ml
	nucl/lipid soln	125x stock	1.6ml
	Vitamin stock	47.6x stock	4.2ml
	folic acid stock	1000x stock	200ul
	Propionic acid		1.2ml
	Nipagin	100 g/l stock in 95% EtOH	3ml
Make to total volume of 200ml with H₂O			