

		Supplementary table S2: Defined media composition		Final amount per liter	SOLVENT	Stock concentration	fold concentration	Volume to add from the stock to the final media preparation	Stock Management	Volume	Amount of stock						
HEMATIN, HEMIN, are retained in the filter, so DO NOT FILTER, add afterwards when required																	
WHEN FINALISED, ADJUST TO PH 6.8 APPROX 3 ML OF CONCENTRATED NaOH/500 ML																	
		Class	Compound	M8: GMM+LAB plus Mucin													
yes	40	Sugar	D-glucose	5 g	H2O	125 g /L	25x	40 ml in 1000 ml		40	400 ml H2O	50 g	Filter sterilize				
yes	6	Sugar	Fructose	1 g	H2O	25 g/L	25x				10 g						
yes	12	Sugar	Maltose	1 g	H2O	25 g/L	25x				10 g						
yes	4	Sugar	Lactose	1 g	H2O	25 g/L	25x				10 g						
	121	Sugar	Cellobiose	1 g	H2O												
yes	103 (-20C)	Others	NAD (N1511)	2 mg	H2O	25 mg/1 ml	12500x	80 ul in 1000 ml	Freeze -80C, 50 ul aliquots	0,08	1 ml H2O	25 mg	Filter sterilize				
yes	94	Others	Hemin	0.5 mg	0.01 M NaOH*	(50 mg/ 1ml 1N NaOH	10000x	1 ml in 1000 ml	Freeze 1 ml aliquots	1	50 ml 0.01 NaOH	25 mg	No filter!!				
yes	19	Others	KCl	50 mg	H2O	50 g/L	1000x	1 ml in 1000 ml	Bottle (bulk)	1	50 ml H2O	2.5 g	Filter sterilize				
yes	96	Others	Hematin	1.2 mg	DMSO	12 mg/1 ml DMSO	10000x	100 ul in 1000 ml	Freeze 20 aliquots of 100 ul, re	0,1	5 ml DMSO	60 mg	No filter!!				
yes	92	Amino acids	Mix 1	0.171 g				*10 ml in 1000 ml		10							
yes	89	Amino acids	Mix 2	0.24 g				**5 ml in 1000 ml		5							
yes	52	Amino acids	L-Cysteine	0.5 g	H2O	0.05 g/L	20x	50 ml in 1000 ml		50	500 ML H2O	5 g	Filter sterilize				
yes	*68	Amino acids	200 mM L-alanyl-Glutamine	13,8 ml			72X	13,8 ml in 1000 ml		13,8						200 mM L-alanyl- Glutamine	
yes	21	Nucleotids	Adenine	11 mg	1M HCl	11 mg/ml	1.000X	1 ml in 1000 ml		1	50 ml 1 M HCl	55 mg					
yes	84	Nucleotids	Guanine	5.6 mg	1M NaOH	56 mg/ml	10.000X	100 ul in 1000 ml		0,1	5 ml 1M NaOH	280 mg					
yes	48	Nucleotids	Uracil	23 mg	1M NaOH	23 mg/ml	1.000X	1 ml in 1000 ml		1	50 ml 1 M NaOH	1.15 g					
yes	47	Nucleotids	Xanthine	3.8 mg	1M NaOH	38 mg/ml	10.000X	100 ul in 1000 ml		0,1	5 ml 1M NaOH	190 mg					
yes	83	Salts & Minerals	KH3CO2 (Potassium acetat	0.9 g	H2O	90 g/l	100x	10 ml in 1000 ml		10	200 ml H2O	18 g	Filter sterilize				
yes	20	Salts & Minerals	FeSO4 . 7H2O	4 mg	10 mM HCl	40 mg/ml	10.000X	100 ul in 1000 ml		0,1	5 ml 10 mM HCl	200 mg	Filter sterilize				
yes	*2	Salts & Minerals	MgCl2.6H2O	0,823 g	H2O	38.6 mg/ml	100X	10 ml in 1000 ml		10	200 ml H2O	7.72 g				MgCl2.6H2O	
yes	*69	Salts & Minerals	ZnCl2	2,371 mg	H2O	5.8 mg/ml	1.250X	800 ul in 1000 ml		0,8	42.6 ml H2O	250 mg	Filter sterilize			ZnCl2 is quite insoluble!	
yes	42	Salts & Minerals	Co(NO3)2 . 6H2O	1 mg	H2O	100 mg/ml	100.000X	10 ul in 1000 ml		0,01	1 ml H2O	100 mg	Filter sterilize				
yes	*17	Salts & Minerals	AlK(SO4)2 *12 H2O	0,185 mg	H2O	10 mg/ml	100.000X	10 ul in 1000 ml		0,01	1 ml H2O	10 mg	Filter sterilize			AlK(S)4)2.12H2O	
yes	*58	Salts & Minerals	Na2SeO3* 5H2O	15 microgramm	H2O	1 mg/ml	100.000X	10 ul in 1000 ml		0,01	1 ml H2O	1 mg	Filter sterilize			Na2SeO3.5H2O	
yes	43	Salts & Minerals	Na2WO4 . 2H2O	0.1 mg	H2O	10 mg/ml	100.000X	10 ul in 1000 ml		0,01	1 ml H2O	10 mg	Filter sterilize				
yes	108	Salts & Minerals	NiCl2	0.11 mg	H2O	1.1 mg/ml	1.000.000X	100 ul in 1000 ml		0,1	10 ml H2O	11 mg	Filter sterilize				
yes	41	Salts & Minerals	CaCl2 (anhydrous)	30.2 mg	H2O	3 g/L	100X	10 ml in 1000 ml		10	200 ml H2O	600 mg	Filter sterilize				
yes	57	Salts & Minerals	CoCl2.6H2O	0.19 mg	H2O	19 mg/ml	100.000X	10 ul in 1000 ml		0,01	1 ml H2O	19 mg	Filter sterilize				
yes	16	Salts & Minerals	CuSO4 (anhydrous)/CuCl2	0.12 mg	H2O	12 mg/ml	100.000X	10 ul in 1000 ml		0,01	1 ml H2O	12 mg	Filter sterilize				
yes	31	Salts & Minerals	H3BO3	0.75 mg	H2O	37.5 mg/ml	50.000X	10 ul in 1000 ml		0,02	2 ml H2O	37.5 mg	Filter sterilize				
yes	39	Salts & Minerals	KI	0.11 mg	H2O	11 mg/ml	100.000X	10 ul in 1000 ml		0,01	1 ml H2O	11 mg	Filter sterilize				
yes	27	Salts & Minerals	MnSO4 * H2O	5 mg	H2O	50 mg/ml	10.000X	100 ul in 1000 ml		0,1	5 ml H2O	250 mg	Filter sterilize				
yes	34	Salts & Minerals	(NH4)6Mo7O24 . 4H2O.	0.19 mg	H2O	19 mg/ml	100.000X	10 ul in 1000 ml		0,01	1 ml H2O	19 mg	Filter sterilize				
yes	1	Salts & Minerals	K2SO4	23 mg	H2O	2.3 g/L	100X	10 ml in 1000 ml		10	200 ml H2O	460 mg	Filter sterilize				
yes	63	Salts & Minerals	NaCl	0.81 g	H2O	81 g/L	100X	10 ml in 1000 ml		10	200 ml H2O0	16.2 g	Filter sterilize				
yes	18	Salts & Minerals	Ammonium citrate dibasic	1.7 g	H2O	42.5 g/L	25X	40 ml in 1000 ml		40	400 ml H2O	17 g	Filter sterilize				
yes	*13	Salts & Minerals	FeCl3*6H2O	5 mg	H2O	50 mg/ml	10.000X	100 ul in 1000 ml		0,1	5 ml H2O	250 mg	Filter sterilize			FeCl3.6H2O	
yes	25	Salts & Minerals	MgSO4 * 7 H2O	30 mg	H2O	30 mg/ml	1000X	1 ml in 1000 ml		1	50 ml H2O	1.5 g	Filter sterilize				
yes	5	Salts & Minerals	NaHCO3	0.4 g	H2O	40 g/L	100X	10 ml in 1000 ml		10	200 ml H2O	8 g	Filter sterilize				
yes	28	Salts & Minerals	Na2MoO4 . 2H2O	0.1 mg	H2O	10 mg/ml	100.000X	10 ul in 1000 ml		0,01	1 ml H2O	10 mg	Filter sterilize				
yes	102 (-20C)	Vitamins & Antioxidants	Mix. vitamins	2 mg			100x	*10 ml in 1000 ml		10							
yes	98	Vitamins & Antioxidants	L-Glutathione reduced	15 mg	H2O	15 mg/ml	1000X	1 ml in 1000 ml		1	50 ml H2O	750 mg	Filter sterilize				
yes	114	Vitamins & Antioxidants	Biotin	5 mg	0,03N NaOH	6.25 mg/ml	1250X	800 ul in 1000 ml		0,8	8 ml 0,03N NaOH	50 mg					
yes	115	Vitamins & Antioxidants	Pyridoxin-HCl	3 mg	H2O	30 mg/ml	10.000X	100 ul in 1000 ml		0,1	1 ml H2O	30 mg	Filter sterilize				
yes	44	Vitamins & Antioxidants	Ascorbic acid	0.5 g	H2O	50 mg/ml	100X	10 ml in 1000 ml		10	200 ml H2O	10 g	Filter sterilize				
yes	104 (-20C)	Vitamins & Antioxidants	Pyridoxamine . 2 HCl	5 mg	H2O	50 mg/ml	100.000X	10 ul in 1000 ml		0,01	1 ml H2O	50 mg	Filter sterilize				
yes	51	Vitamins & Antioxidants	p-Aminobenzoic acid	50 µg	H2O	5 mg/ml	100.000X	10 ul in 1000 ml		0,01	1 ml H2O	5 mg	Filter sterilize				
yes	55	Vitamins & Antioxidants	Lipoic acid	1.05 mg	DMSO	10.5 mg/ml	10.000X	100 ul in 1000 ml		0,1	5 ml H2O	52.5 mg	Filter sterilize				
yes	95 (4C)	Vitamins & Antioxidants	Vitamin B12	1 µg	H2O	0.1 mg/ml	1.000.000X	10 ul in 1000 ml		1	10 ml H2O	1 mg	Filter sterilize				
yes	90 (4C)	Vitamins & Antioxidants	Vitamin K (menadiione)	1 mg	DMSO	10 mg/ml	10.000X	100 ul in 1000 ml		0,1	25 ml DMSO	250 mg	Filter sterilize				
yes	77	SCFA	Acetic acid	1.7 mL						1,7							
yes	49	SCFA	Isovaleric acid	0.1 mL						0,1							
yes	24	SCFA	Propionic acid	2 mL						2							
yes	9	SCFA	Butyric acid	2 mL						2							
yes	79	Buffer compounds	KH2PO4	13.609 g		136.09 g/L	10X	100 ml in 1000 ml	These go together	100	1 L H2O	136.09 g	Filter sterilize				
yes	*29	Buffer compounds	K2HPO4*3H2O	8,47 g		64.8 g/L	10X				1 L H2O	64.8 g				K2HPO4.3H2O	
yes	22	Buffer compounds	Tricine	1.5 g		15 g/L	10X				1 L H2O	15 g					
yes	14	Buffer compounds	EDTA	12.34 mg	0.1 M NaOH	1.23 g/L	100X	10 ml in 1000 ml		10	200 ml H2O	246 mg	Filter sterilize				
yes	46	Buffer compounds	Nitrilotriacetic acid	7.34 mg	1 M NaOH	7.34 mg/ml	1000X	1 ml in 1000 ml		1	50 ml H2O	367 mg	Filter sterilize				
										347							
										653	H2O						