

iMPS Platedown Procedure

Protocol Number : CSMNC-SOP-C-001 - APPENDIX A

Date of Original Version : 6/19/2015 Revision Date : 8/3/2015

Media Formulations for Derivation, Propagation and Maturation of Motor Neural Cultures					Add immediately before use		Light Sensitive		
Neural Differentiation Media (NDM)	Stock Concentration	Units	1X Concentration	Units	Volume 1,000 mL	Volume 500 mL	Volume 250	Volume 100	Volume 50
IMDM	1X	mL	47.5%	mL	475 mL	237.5 mL	118.75	47.5	23.75
F-12	1X	mL	47.5%	mL	475 mL	237.5 mL	118.75	47.5	23.75
Non-Essential Amino Acids (NEAA)	100X	mL	1.0%	mL	10 mL	5 mL	2.5	1	0.5
B-27	50X	mL	2.0%	mL	20 mL	10 mL	5	2	1
N-2	100X	mL	1.0%	mL	10 mL	5 mL	2.5	1	0.5
PSA	100X	mL	1.0%	mL	10 mL	5 mL	2.5	1	0.5

Motor Neuron Maturation Media (MNMM) Stage 1	Stock Concentration	Units	1X Concentration	Units	Volume 500	Volume 250	Volume 100	Volume 50	Volume 25	Volume 10
NDM	1X	mL	99.8%	mL	498 mL	249 mL	99.6 mL	49.8	24.9	9.96
All-trans Retinoic Acid (ATRA)	10	µM	10.0%	µM	5 µL	2.5 µL	1 µL	0.5	0.25	0.1
PMN	10	µM	100.0%	µM	50 µL	25 µL	10 µL	5	2.5	1
BDNF	10	µg/mL	10	ng/mL	500 µL	250 µL	100 µL	50	25	10
GDNF	10	µg/mL	10	ng/mL	500 µL	250 µL	100 µL	50	25	10
Ascorbic Acid	500	µg/mL	200	ng/mL	200 µL	100 µL	40 µL	20	10	4
db-cAMP	102	µM	1	µM	5 µL	2.5 µL	1 µL	0.5	0.25	0.1
DAPT	20	µM	2.5	µM	62.5 µL	31.3 µL	12.5	6.3	3.1	1.6

Motor Neuron Maturation Media (MNMM) Stage 2	Stock Concentration	Units	1X Concentration	Units	Volume 500	Volume 250	Volume 100	Volume 50	Volume 25	Volume 10
Neurobasal	1X	mL	98.8%	mL	482 mL	241 mL	96.4 mL	48.2	24.1	9.64
NEAA	100X	mL	1.0%	mL	5 mL	2.5 mL	1 mL	0.5 mL	0.25 mL	0.1 mL
Glutamax	200X	mL	0.5%	mL	2.5 mL	1.25 mL	0.5 mL	0.25	0.125	0.05
N-2	100X	mL	1.0%	mL	5 mL	2.5 mL	1 mL	0.5	0.25	0.1
BDNF	10	µg/mL	10	ng/mL	500 µL	250 µL	100 µL	50	25	10
GDNF	10	µg/mL	10	ng/mL	500 µL	250 µL	100 µL	50	25	10
Ascorbic Acid	500	µg/mL	200	ng/mL	200 µL	100 µL	40 µL	20	10	4
db-cAMP	102	µM	1	µM	5 µL	2.5 µL	1 µL	0.5	0.25	0.1
Ara-C	10	µM	0	µM	5 µL	2.5 µL	1 µL	0.5	0.25	0.1
PSA	100X	mL	0.01	mL	5 mL	2.5 mL	1 mL	0.5	0.25	0.1