

This recipe is based upon Dong Kong (2010).

The 10X ACSF contains zero (0) glucose. The following calculates various glucose concentrations for 500mL-2L volumes of 1X ACSF. Sucrose makes up the difference for a total Gluc + Suc concentration of 10mM.

500mL Solutions														
Glucose	Conc. (mM)	Weight to Add	Glucose	Conc. (mM)	Weight to Add	Glucose	Conc. (mM)	Weight to Add	Glucose	Conc. (mM)	Weight to Add	Glucose	Conc. (mM)	Weight to Add
Sucrose	1	90.1 mg	Sucrose	2	180 mg	Sucrose	3	270 mg	Sucrose	4	360 mg	Glucose	5	450 mg
	9	1.54 g		8	1.37 g		7	1.2 g		6	1.03 g	Sucrose	5	856 mg
Glucose	6	540 mg	Glucose	7	631 mg	Glucose	8	721 mg	Glucose	9	811 mg	Glucose	10	901 mg
Sucrose	4	685 mg	Sucrose	3	513 mg	Sucrose	2	342 mg	Sucrose	1	171 mg	Sucrose	0	0

1000mL Solutions														
Glucose	Conc. (mM)	Weight to Add	Glucose	Conc. (mM)	Weight to Add	Glucose	Conc. (mM)	Weight to Add	Glucose	Conc. (mM)	Weight to Add	Glucose	Conc. (mM)	Weight to Add
Sucrose	1	180.2 mg	Sucrose	2	360 mg	Sucrose	3	540 mg	Sucrose	4	720 mg	Glucose	5	900 mg
	9	3.08 g		8	2.74 g		7	2.4 g		6	2.06 g	Sucrose	5	1.712 g
Glucose	6	1.08 g	Glucose	7	1.262 g	Glucose	8	1.442 g	Glucose	9	1.622 g	Glucose	10	1.802 g
Sucrose	4	1.37 g	Sucrose	3	1.026 g	Sucrose	2	684 mg	Sucrose	1	342 mg	Sucrose	0	0

1500mL Solutions														
Glucose	Conc. (mM)	Weight to Add	Glucose	Conc. (mM)	Weight to Add	Glucose	Conc. (mM)	Weight to Add	Glucose	Conc. (mM)	Weight to Add	Glucose	Conc. (mM)	Weight to Add
Sucrose	1	270.3 mg	Sucrose	2	540 mg	Sucrose	3	810 mg	Sucrose	4	1.08 g	Glucose	5	1.35 g
	9	4.62 g		8	4.11 g		7	3.6 g		6	3.09 g	Sucrose	5	2.568 g
Glucose	6	1.62 g	Glucose	7	1.893 g	Glucose	8	2.163 g	Glucose	9	2.433 g	Glucose	10	2.703 g
Sucrose	4	2.055 g	Sucrose	3	1.539 g	Sucrose	2	1.026 g	Sucrose	1	513 mg	Sucrose	0	0

2000mL Solutions														
Glucose	Conc. (mM)	Weight to Add	Glucose	Conc. (mM)	Weight to Add	Glucose	Conc. (mM)	Weight to Add	Glucose	Conc. (mM)	Weight to Add	Glucose	Conc. (mM)	Weight to Add
Sucrose	1	360.4 mg	Sucrose	2	720 mg	Sucrose	3	1.08 g	Sucrose	4	1.44 g	Glucose	5	1.8 g
	9	6.16 g		8	5.48 g		7	4.8 g		6	4.12 g	Sucrose	5	3.424 g
Glucose	6	2.16 g	Glucose	7	2.524 g	Glucose	8	2.884 g	Glucose	9	3.244 g	Glucose	10	3.604 g
Sucrose	4	2.74 g	Sucrose	3	2.052 g	Sucrose	2	1.368 g	Sucrose	1	684 mg	Sucrose	0	0