

Instructions how to use template												
1. Prepare Stock Solutions: Fill water to 75% of total volume → Weigh & dissolve. For Srequired mass of salt (ensure MW of salt, may change depending on hydrated state) → Adjust pH (if listed, base= KOH, acid = HCl)→ Fill water to final volume.												
2. Prepare Buffer Solution: Add required volume of each stock solution adjust to final volume with water → Omit TCEP until day of. For sucrose, add directly to buffer and dissolve. Then adjust volume to final volume with water.												
3. Usage Notes: Modify highlighted values in blue → Check units carefully → Output values shown in purple.												
Stock Solutions	MW (g/mol)	Concentration (M)	Volume (L)	Mass (g)								
Ammonium Chloride	53.49	1	1	53.49								
Ammonium Sulfate	132.14		dry (grams)	Add directly to buffer								
HEPES-KOH pH 7.6	238.3	1	1	238.3								
Magnesium Acetate	95.21	1	0.25	23.80								
Potassium Chloride	74.55	1	1	74.55								
Sucrose	342.3		dry (grams)	Add directly to buffer								
TCEP		0.5										
	Ribosome Lysis Buffer		Ribosome Salting Out Buffer		Ribosome Wash Buffer		Ribosome Elution Buffer		Cushion Buffer		Ribosome Buffer	
Solutions	Concentration (mM)	Volume required (mL)	Concentration (mM)	Volume required (mL)	Concentration (mM)	Volume required (mL)	Concentration (mM)	Volume required (mL)	Concentration (mM)	Volume required (mL)	Concentration (mM)	Volume required (mL)
Ammonium Chloride									30	15		
Ammonium Sulfate			3000	59.46 g	1500	99.11 g						
HEPES-KOH pH 7.6	10	1.5	10	1.5	20	10	20	10	20	10	20	5
Magnesium Acetate	10	1.5	10	1.5	10	5	10	5	10	5	6	1.5
Potassium Chloride	50	7.5	50	7.5							30	
TCEP	1	0.3	1	0.3	1	1	1	1	1	1	1	0.5
Sucrose									30%	150 g		
Water		139.2		~79.7		~384.9		484		~319		243
	Total Volume (mL)	150	Total Volume (mL)	150	Total Volume (mL)	500	Total Volume (mL)	500	Total Volume (mL)	500	Total Volume (mL)	250