

Nuclear Protein Extraction (small scale) large scale protocol on pg 109

cell ~ 2 mL / sample of Buffer A
 ~ 5 mL / sample of Buffer B

Buffer A	10cc	Buffer B	10cc
10mM Hepes 7.9	100 λ of 1M	20mM Hepes 7.9	200 λ of 1M
10mM KCl	100 λ of 1M	20% glycerol	2 mL
1.5mM MgCl ₂	15 λ of 1M	420 mM NaCl	840 λ of 5M
	+ 9.785 cc H ₂ O	1.5mM MgCl ₂	15 λ of 1M
		2mM EDTA	4 λ of 5M
			+ 6.941 mL H ₂ O

Just before use, add to A & B:

5mM DTT	50 λ / 10 mL of 1M
0.5mM PMSF	50 λ / 10 mL of 100mM
1:1000 Aprataxin (10mg/mL)	10 λ / 10 mL of (10mg/mL)

- Spm down cells @ 1000rpm X 5-10', 4°C — aspirate super
- Resuspend pellets in ~ 10 mL PBS in 15cc tube
- Spm @ 1000rpm X 5-10', 4°C — aspirate supernatant
- Resuspend in 4 vol (relative to pellet) of buffer A
- Incubate on ice X 1 hour.
- Double homogenize (type B pestle) 20 strokes
- Transfer suspension to an eppendorf
- Spm @ 2000rpm, X 5', 4°C — aspirate
- resuspend in ~ 1 mL buffer A
- Spm @ 2000rpm X 5', 4°C — aspirate
- Resuspend in 3 vol buffer B
- incubate on ice X 30'
- Spm 20' high speed
- Transfer supernatant to new tube
- ✓ protein with Bradford assay (1:160 dil, 595 nm)
- Snap freeze → -70°C ✓ → 5 λ → 800 λ + 200 λ Bradford