Subunit Association (Xinying Shi)

Gradients

Prepare 11ml sucrose 10%-40% in Buffer C (20mM Mg²⁺)

Needle: 18G1/2

Store at 4°C for at least 2hr before use

10%(w/w,103.8 mg/ml) 4.2g in 40ml buffer C 40%(w/w,470.6mg/ml) 18.8g in 40ml buffer C 50%(w/w,614.8mg/ml) 30.8g in 50ml water

	Stock solution	Gradients	
50mM Tris-HCl (7.6)	1M	2.0ml	
20mM MgCl ₂	1M	0.8ml	
100mM NH ₄ Cl	5M	0.8ml	
6mM BME	14.4M	16ul	
water			
Sucrose		4.2g/18.8g	
Final volume		40ml	

5X Buffer C (20mM Mg ²⁺)		1000ul
250mM Tris-HCl,pH7.5	1M	250ul
100mM MgCl ₂	1M	100ul
500mM NH ₄ Cl	5M	100ul
30mM BME	14.4M	2ul
water		550ul

Reaction

30s and 50s subunit were heat activated at 42°C for 20min in buffer C. To form 70s, 20pmol 30s and 40pmol 50s were associated at 37°C for 10min, then Load onto sucrose gradient

Spin at SW41 rotor, 32000rpm for 15.5hr.

Analyze gradients on ISCO gradient fractionators.

Sensitivity: 0.2 abs, chart speed: 150cm/hr