

Materials List for:

Probing The Structure And Dynamics Of Nucleosomes Using Atomic Force Microscopy Imaging

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Materials

Name	Company	Catalog Number	Comments
Plasmid pGEM3Z-601	Addgene, Cambridge, MA	26656	
PCR Primers	IDT, Coralville, IA	Custom Order	(FP) 5'-CAGTGAATTGTAATACGACTC-3' (RP) 5'-ACAGCTATGACCATGATTAC-3'
DreamTaq polymerase	ThermoFischer Scientific, Waltham, MA	EP0701	Catalog number for 200 units
PCR purification kit	Qiagen, Hilden, Germany	28104	Catalog number for 50 units
Tris base	Sigma-Aldrich, St. Louis, MO	10708976001	Catalog number for 250 g
EDTA	ThermoFischer Scientific, Waltham, MA	15576028	Catalog number for 500 g
(CENP-A/H4)2, recombinant human	EpiCypher, Durham, NC	16-0010	Catalog number for 50 ug
H2A/H2B, recombinant human	EpiCypher, Durham, NC	15-0311	Catalog number for 50 ug
H3 Octamer, recombinant human	EpiCypher, Durham, NC	16-0001	Catalog number for 50 ug
Slide-A-Lyzer MINI Dialysis Device Kit, 10K MWCO, 0.1 mL	ThermoFischer Scientific, Waltham, MA	69574	Catalog number for 10 devices
Sodium Chloride	Sigma-Aldrich, St. Louis, MO	S9888-500G	Catalog number for 500 mg
Amicon Ultra-0.5 mL Centrifugal Filters	Millipore-sigma, Burlington, MO	UFC501008	Catalog number for 8 devices
HCl	Sigma-Aldrich, St. Louis, MO	258148-25ML	Catalog number for 25 mL
Tricine	Sigma-Aldrich, St. Louis, MO	T0377-25G	Catalog number for 25 g
SDS	Sigma-Aldrich, St. Louis, MO	11667289001	Catalog number for 1 kg
Ammonium Persulfate (AmmPS)	Bio-Rad, Hercules, CA	1610700	Catalog number for 10 g
30% Acrylamide/Bis Solution, 37.5:1	Bio-Rad, Hercules, CA	1610158	Catalog number for 500 mL
TEMED	Bio-Rad, Hercules, CA	1610800	Catalog number for 5 mL
4x Laemmli protein sample buffer for SDS-PAGE	Bio-Rad, Hercules, CA	1610747	Catalog number for 10 mL
2-ME	Sigma-Aldrich, St. Louis, MO	M6250-10ML	Catalog number for 10 mL
ageRuler Prestained Protein Ladder	ThermoFischer Scientific, Waltham, MA	26616	Catalog number for 500 uL
Bio-Safe™ Coomassie Stain	Bio-Rad, Hercules, CA	1610786	Catalog number for 1 L
Nonwoven cleanroom wipes: TX604 TechniCloth	TexWipe, Kernersville, NC	TX604	
Muscovite Block Mica	AshevilleMica, Newport News, VA	Grade-1	
Aminopropyl silatrane (APS)	Synthesized as described in 22		
HEPES	Sigma-Aldrich, St. Louis, MO	H4034-25G	Catalog number for 25 g
Scotch Tape	Scotch-3M, St. Paul, MN		

TESPA-V2 afm probe (for static imaging)	Bruker AFM Probes, Camarillo, CA		
MSNL-10 afm probe (for standard time-lapse imaging)	Bruker AFM Probes, Camarillo, CA		
Aron Alpha Industrial Krazy Glue	Toagosei America, West Jefferson, OH	AA480	Catalog number for 2 g tube
MgCl ₂	Sigma-Aldrich, St. Louis, MO	M8266-100G	Catalog number for 100 g
Millex-GP Filter, 0.22 μm	Sigma-Aldrich, St. Louis, MO	SLGP05010	Catalog number for 10 devices
BL-AC10DS-A2 afm probe (for HS-AFM)	Olympus, Japan		
Compound FG-3020C-20	FluoroTechnology Co., Ltd., Kagiya, Kasugai, Aichi, Japan		
Compound FS-1010S135-0.5	FluoroTechnology Co., Ltd., Kagiya, Kasugai, Aichi, Japan		
MultiMode Atomic Force Microscope	Bruker-Nano/Veeco, Santa Barbara, CA		
High-Speed Time-Lapse Atomic Force Microscopy	Toshio Ando, Nano-Life Science Institute, Kanazawa University, Kakuma-machi, Kanazawa, Japan		