

Materials List for:

Methods for the Self-integration of Megamolecular Biopolymers on the Drying Air-LC Interface

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Materials

Name	Company	Catalog Number	Comments
sacran	Green Science Materials Inc., Japan		From <i>Aphanotheca sacrum</i> . $M_w = 1.9 \times 10^7 \text{ g mol}^{-1}$
xanthan gum	Taiyo Kagaku Co., Japan	Neosoft XC	From <i>Xanthomonas campestris</i> . $M_w = 4.7 \times 10^6 \text{ g mol}^{-1}$
tubulin	Cytoskeleton, Inc., USA	T240	From porcine brain.
GpCpp	Jena Bioscience, Germany	NU405L	
piperazine- <i>N,N'</i> -bis(2-ethanesulfonic acid)	Sigma-Aldrich, Co. LLC.	P6757-500G	PIPES
ethylene glycol-bis(β -aminoethyl ether)- <i>N,N,N',N'</i> -tetraacetic acid	Dojindo Molecular Technologies, Inc.	342-01314	EGTA
MgCl ₂ ·6H ₂ O	Wako Pure Chemical Industries, Ltd.	135-15055	
KOH	Wako Pure Chemical Industries, Ltd.	162-21813	pellet
DNA	Sigma-Aldrich, Co. LLC.	D1626	From salmon testes. $M_w = 1.3 \times 10^6 \text{ Da}$ (~2,000 bp)
Tris-EDTA buffer solution	Sigma-Aldrich, Co. LLC.	T9285-100ML	10 mM Tris, pH 8.0, with 1 mM EDTA
slide glass	Matsunami Glass Ind., Ltd., Japan	S1111	
silicon rubber sheet	Asone Co.	6-611-32	Thickness: 1 mm
centrifuge	Beckman-Coulter, Inc., USA	Avanti J-25	equipped with a JA-20 rotor
light source	Sumita Optical Glass, Inc., Japan	LS-LHA	
light guide	Sumita Optical Glass, Inc., Japan	GF7.2-1-L1500R-M80 (AAAR-015M)	80 mm × 80 mm
halogen lamp	Ushio Inc., Japan	JCR 15V150WBN	
holder	Sigmakoki, Co.,Ltd.	KMH-80	
sample stage	Sigmakoki, Co.,Ltd.	TARW-25503L	
sample holder	Sigmakoki, Co.,Ltd.	SHA-25RO	
rod	Sigmakoki, Co.,Ltd.	ROU-12-40	
posts holder	Sigmakoki, Co.,Ltd.	RS-6-40	
posts holder	Sigmakoki, Co.,Ltd.	RS-12-60	
posts holder	Sigmakoki, Co.,Ltd.	RS-12-80	
posts holder	Sigmakoki, Co.,Ltd.	RS-12-130	
carrier	Sigmakoki, Co.,Ltd.	CAA-25LS	
camera holder	Sigmakoki, Co.,Ltd.	CMH-2	

medium optical rail	Sigmakoki, Co.,Ltd.	OBA-500SH	
lenstube	Tomytech, BORG	lenstube BK	80φ, L25 mm
lenstube	Tomytech, BORG	lenstube BK	80φ, L50 mm
multiband	Tomytech, BORG		80φ
V plate	Tomytech, BORG	V plate 60S	
plate holder	Viexen, Co.,Ltd.	plate holder SX	
EOS Kiss X7i	Canon Inc., Japan	8594B001	with a standard zoom lens, EFP 18-55 mm
photographic software	Canon Inc., Japan	EOS Utility	
PC	Microsoft	Surface	
polarization microscope	Olympus	BX51	
first order retardation plate	Olympus	U-TP530	$\lambda = 530 \text{ nm}$
CCD camera	Olympus	DP80	
photographic software	Olympus	cellSens Standard	
Java-based image processing program	the National Institutes of Health	ImageJ	