Materials List for:

Iterative Optimization of DNA Duplexes for Crystallization of SeqA-DNA Complexes

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Materials

Name	Company	Catalog Number	Comments
TRIS	Bioshop	TRS003.5	
Ethylenediaminetetraacetic acid (EDTA)	Fisher Scientific	E478-500	
Dithiotheitrol (DTT)	Bio Basic Inc.	DB0058	
NaCl	Bioshop	SOD002.10	
Glycerol	Caledon	5350-1	
Sucrose	Sigma-Aldrich	S5016-500G	
Sodium dodecyl sulfate (SDS)	Bioshop	SDS001.500	
Urea	Bioshop	URE001.5	
40% 29:1 Bis/acrylamide	Bio Basic Inc.	A0007-500ml	Store at 4 °C
Boric acid	EMD	BX0865-1	
Xylene cyanol FF	Bio-Rad	161-0423	
Bromophenol Blue	Bioshop	BR0222	
Dual Adjustable Vertical Gel System	C.B.C. Scientific Company Inc.	DASG-250	
Index crystallization screen	Hampton Research	HR2-144	Store at 4 °C
Wizard I crystallization screen	Emerald BioSystems	EBS-WIZ-1	Store at 4 °C
Wizard II crystallization screen	Emerald BioSystems	EBS-WIZ-2	Store at 4 °C
Classics crystallization screen	Qiagen	130701	Store at 4 °C
Intelliplate trays	Art Robbins Instruments	102-0001-00	

Solutions

Protein purification buffer: 100 mM TRIS pH 8, 2 mM EDTA, 2 mM DTT and 5% glycerol.

Protein storage buffer: 20 mM TRIS pH 8, 150 mM NaCl, 5 mM DTT, 0.5 mM EDTA and 5% glycerol.

Gel loading mix: Add 20 g of sucrose, 25 mg of bromophenol blue, 25 mg of xylene cyanol FF, 1 ml of 10% w/v SDS and 10 ml of 10X TBE to 70 ml of autoclaved ddH_2O. Stir with mild heating until sucrose is dissolved and adjust the final volume to 100 ml with autoclaved ddH_2O. Store at 4 °C.

2X loading buffer: Add 11 g of urea to 10 ml of gel loading mix. Stir on a hot plate until urea dissolves. Aliquot in 2 ml tubes and store at 4 °C.

10X PAGE mix: Mix 420.4 g of urea, 100 ml of 10X TBE (autoclaved), 250 ml of 40% 29:1 Bis/Acrylamide in ddH_2O. Stir until totally dissolved and adjust volume to 1 liter. Store in dark bottles at 4 °C.

10X TBE: Dissolve 108 g of TRIS, 55 g of boric acid and 9.3 g of EDTA in 1 liter of ddH_2O. Autoclave and store at room temperature.

Elution buffer: Dilute 8 ml of 5 M NaCl, 2 ml of 1 M TRIS pH 7.5, 0.4 ml of 0.5 M EDTA pH 8 on 200 ml of ddH_2O. Autoclave and store at room temperature.

