

Materials List for:

# Gel-seq: A Method for Simultaneous Sequencing Library Preparation of DNA and RNA Using Hydrogel Matrices

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## Materials

Name	Company	Catalog Number	Comments
<i>Reagents</i>			
Acrylamide Monomer	Sigma Aldrich	A8887-100G	
Ammonium Persulfate	Sigma Aldrich	A3678-25G	
Ampure XP Beads	Beckman Coulter	A63880	Referred to in the text as solid phase reversible immobilization (SPRI) beads
DNA Gel Loading Dye (6x)	ThermoFisher Scientific	R0611	Referred to in the text as 6X loading dye
Ethyl alcohol	Sigma Aldrich	E7023-500ML	
KAPA SYBR FAST One-Step qRT-PCR Kits	Kapa BioSystems	7959613001	Referred to in the text as 2X qPCR mix
N,N'-Methylenebis(acrylamide)	Sigma Aldrich	146072-100G	Also known as bis-acrylamide
NexteraXT DNA Library Preparation Kit (referred to in the text as library preparation kit)	Illumina	FC-131-1024	Includes: TD (referred to in the text as transposase buffer), ATM (referred to in the text as transposase), NT (referred to in the text as transposase stop buffer), and NPM (Referred to in the text as library prep PCR mix)
Nuclease Free Water	Millipore	3098	
Protease	Qiagen	19155	
SMART-Seq v4 Kit (referred to in the text as whole-transcript amplification (WTA) kit)	Takara/Clontech	634888	Includes: Lysis buffer, RNase inhibitor, 3' SMART-Seq CDS Primer II A (referred to in the text as RT primer), 5X Ultra Low First Strand Buffer (referred to in the text as first strand buffer), SMART-Seq v4 Oligonucleotide (referred to in the text as template switch oligonucleotide (TSO)), SMART-Scribe Reverse Transcriptase (referred to in the text as reverse transcriptase), and PCR Primer II A (referred to in the text as cDNA PCR primer)
Random hexamer with WTA adapter	IDT	n/a	5'-AAGCAGTGGTATCAACGCAGAGTAC-NNNNNN-3'
Sucrose	Sigma Aldrich	S0389-500G	
TEMED	Sigma Aldrich	T9281-25ML	

DNA AWAY Surface Decontaminant	ThermoFisher Scientific	7010PK	Referred to in the text as DNA removal product
Tris-Borate-EDTA buffer (10X concentration)	Sigma Aldrich	T4415-1L	
SYBR Gold Nucleic Acid Gel Stain (10,000X Concentrate in DMSO)	ThermoFisher Scientific	S11494	Referred to in the text as gel stain
<i>Equipment</i>			
BD Precisionslide syringe needles, gauge 18	Sigma Aldrich	Z192554	Any equivalent hardware is acceptable
Branson CPX series ultrasonic bath	Sigma Aldrich	Z769363	Any equivalent hardware is acceptable
Empty Gel Cassettes, mini, 1.0 mm	ThermoFisher Scientific	NC2010	Any equivalent hardware is acceptable
Mesh Filter Plate - Corning HTS Transwell 96 well permeable supports - 8.0 µm pore size	Sigma Aldrich	CLS3374	Referred to in the text as 8 µm mesh filter plate
PowerPac HC Power Supply	Bio-Rad	1645052	Any equivalent hardware is acceptable
Qubit Fluorometer	ThermoFisher Scientific	Q33216	Any equivalent hardware is acceptable
VacuFuge Concentrator	Eppendorf	22822993	Any equivalent hardware is acceptable
XCell SureLock Mini-Cell system	ThermoFisher Scientific	EI0001	Any equivalent hardware is acceptable
Bio-Rad CFX96 Touch Real-Time PCR Detection System	Bio-Rad	1855195	Any equivalent hardware is acceptable
Amersham UVC 500 Ultraviolet Crosslinker	GE Healthcare Life Sciences	UVC500-115V	Discontinued, any equivalent hardware is acceptable
Gel Doc XR+ Gel Documentation System	Bio-Rad	1708195	Referred to in the text as gel imager
Dark Reader Transilluminator	Clare Chemical Research	DR89	Referred to in the text as UV transilluminator
Ultrasonic Bath	Branson	1207K35	Any equivalent ultrasonic bath is acceptable.