

Materials List for:

# Using *In Vitro* and In-cell SHAPE to Investigate Small Molecule Induced Pre-mRNA Structural Changes

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## Materials

Name	Company	Catalog Number	Comments
DNA oligonucleotide	IDT		gBlock for > 200 bp DNA synthesis
Phusion Green Hot Start II High-Fidelity PCR Master Mix	Thermo Fisher	F566S	
NucleoSpin gel and PCR clean-up kit	Takara	740609.50	
MegaScript T7 transcription kit	Thermo Fisher	AM1333	Contains 10X reaction buffer, T7 enzyme, NTP and Turbo DNase
DEPC-treated water	Thermo Fisher	750023	
2X TBE-urea sample buffer	Thermo Fisher	LC6876	
40% acrylamide/ bisacrylamide solution (29:1)	Bio-Rad	1610146	
10X TBE buffer	Thermo Fisher	15581044	
Nalgene Rapid-Flow™ Filter Unit	Thermo Fisher	166-0045	
Kimwipe	Kimberly-Clark	34133	
TEMED	Thermo Fisher	17919	
SYBR-Safe dye	Thermo Fisher	S33102	
6 % TBE-urea mini-gel	Thermo Fisher	EC6865BOX	
ChemiDoc	Bio-Rad		
T4 PNK	NEB	M0201S	
$\gamma$ - <sup>32</sup> P-ATP	Perkin Elmer	NEG035C005MC	
Hyperscreen™ Intensifying Screen	GE Healthcare	RPN1669	calcium tungstate phosphor screen
phosphor storage screen	Molecular Dynamics	BAS-IP MS 3543 E	
Amersham Typhoon	GE Healthcare		
NAI (2M)	EMD Millipore	03-310	
GlycoBlue	Thermo Fisher	AM9515	
SuperScript IV Reverse Transcriptase	Thermo Fisher	18090010	Contains 5X RT buffer, SuperScript IV
dNTP mix (10 mM)	Thermo Fisher	R0192	
ddNTP set (5mM)	Sigma	GE27-2045-01	
large filter paper	Whatman	1001-917	
Gel dryer	Hoefer	GD 2000	
QIAamp DNA Blood Mini Kit	Qiagen	51104	Also contains RNase A and protease K
SMN2 minigene <sup>34</sup>	Addgene	72287	
Heat inactivated FBS	Thermo Fisher	10438026	

Pen-Strep	Thermo Fisher	15140122	
Opti-MEM I	Thermo Fisher	31985062	
FuGene HD	Promega	E2311	
TrpLE	Thermo Fisher	12605010	
DPBS without Ca/ Mg	Thermo Fisher	14190250	
TRIzol	Thermo Fisher	15596018	
RNeasy mini column	Qiagen	74104	Also contains RW1, RPE buffer
RNase-Free DNase Set	Qiagen	79254	Contains DNase I and RDD buffer
Deionized formamide	Thermo Fisher	AM9342	
MnCl <sub>2</sub> •4H <sub>2</sub> O	Sigma-Aldrich	M3634	
random nonamer	Sigma-Aldrich	R7647	
SuperScript First-Strand Synthesis System	Thermo Fisher	11904-018	Contains 10X RT buffer, SuperScript II reverse transcriptase
AccuPrime pfx DNA polymerase	Thermo Fisher	12344024	