

Materials List for:

# Real-time Imaging of Single Engineered RNA Transcripts in Living Cells Using Ratiometric Bimolecular Beacons

Yang Song<sup>\*1</sup>, Xuemei Zhang<sup>\*1</sup>, Lingyan Huang<sup>2</sup>, Mark A. Behlke<sup>2</sup>, Andrew Tsourkas<sup>1</sup>

<sup>1</sup>Department of Bioengineering, University of Pennsylvania

<sup>2</sup>Integrated DNA Technologies, Inc.

\*These authors contributed equally

Correspondence to: Andrew Tsourkas at [atsourk@seas.upenn.edu](mailto:atsourk@seas.upenn.edu)

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## Materials

Name	Company	Catalog Number	Comments
Nuclease-free water	Life Technologies	AM9932	no DEPC-treated
DPBS	Life Technologies	14190-144	No Ca <sup>2+</sup> and Mg <sup>2+</sup>
Cary 100 UV-Vis spectrophotometer	Agilent Technologies		
Potassium phosphate dibasic	Fisher Scientific	P290-500	
Potassium phosphate monobasic	Fisher Scientific	P284-500	
Sodium phosphate monobasic	Fisher Scientific	S381-500	
Microcentrifuge tubes	Eppendorf	22364111	1.5 ml
Chromatography column	Kimble Chase Life Science	420400-0720	0.7 x 20 cm
Superdex 75 prep grade	GE healthcare	17-1044-01	
Syringe pump	Braintree Scientific	BS-300	
Syringe	BD	301035	60 ml, Luer-lok tip
Centrifugal filter units	Millipore	UFC501096	MW 10,000 cutoff
Centrifuge 5418	Eppendorf		
Poly-D-lysine	Sigma-Aldrich	P7280-5MG	lyophilized powder, g-irradiated
8-well chambered coverglass	Fisher Scientific	155409	Working volume 0.2-0.5 ml
HT1080	ATCC	CCL-121	Human Fibrosarcoma cell line
Cell culture flask	Corning	430639	25 cm <sup>2</sup>
DMEM	Life Technologies	11965084	High glucose
DMEM without phenol red	Life Technologies	21063029	High glucose
Fetal bovine serum	Sigma-Aldrich	F2442-500ML	
Penicillin/streptomycin	Life Technologies	15140122	
Trypsin	Life Technologies	25300054	0.05% Trypsin-EDTA
Neon transfection system	Life Technologies	MPK5000	
Neon transfection system kit	Life Technologies	MPK1096	
Hemocytometer	Fisher Scientific	02-671-10	
Hoescht 33342	Life Technologies	H1399	
IX-81 Inverted fluorescence microscope	Olympus		
SOLA light engine	Lumencor		
Metamorph	Molecular Devices		Software controlling microscope
Immersol oil 518F	Fisher Scientific	12-624-66B	