

Materials List for:

# Generation of Genome-wide Chromatin Conformation Capture Libraries from Tightly Staged Early *Drosophila* Embryos

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URL: <https://www.jove.com/video/57001>

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## Materials

Name	Company	Catalog Number	Comments
Biotin-14-dATP	Life Technologies	19524016	
Mbol	New England Biolabs	R0147L	
DNA Polymerase I Klenow Fragment	New England Biolabs	M0210L	
T4 DNA Ligase	Thermo Fisher	EL0012	T4 DNA Ligase Buffer included
T4 DNA Polymerase	New England Biolabs	M0203L	
Proteinase K	AppliChem	A4392	
GlycoBlue	Life Technologies	AM9516	
Complete Ultra EDTA-free protease inhibitors	Roche	5892791001	
NEBNext Multiplex Oligos for Illumina (Index Primers Set 1)	New England Biolabs	E7335	Sequencing Adaptor, Forward (unindexed) PCR primer and Reverse (indexed) PCR primer and USER enzyme used in the Library preparation section are components of this kit
NEBNext Ultra II DNA Library Prep Kit	New England Biolabs	E7645	End Prep Enzyme Mix, End Prep Reaction Buffer, Ligation Enhancer, Ligation Master Mix and Polymerase Master Mix used in the Library preparation section are components of this kit
Covaris S2 AFA System	Covaris		
DNA LoBind Tubes, 1.5 mL	Eppendorf	0030108051	
Falcon cell strainer 100 µm	Corning	352360	Embryo collection baskets
37% formaldehyde	VWR	437536C	
Heptane	AppliChem	122062.1612	
M165 FC fluorescent stereo microscope	Leica		
M165 FC DFC camera	Leica		
Metal micro pestle	Carl Roth	P985.1	Used to lyse embryos in step 4.1.4
RNase A	AppliChem	A3832,0050	
Dynabeads MyOne Streptavidin C1	Life Technologies	65002	Streptavidin coated magnetic beads
Ampure XP beads	Beckman Coulter	A63881	
Qubit 3.0 Fluorometer	Thermo Fisher Scientific	Q33216	
Qubit assay tubes	Thermo Fisher Scientific	Q32856	
Qubit dsDNA HS Assay Kit	Thermo Fisher Scientific	Q32854	
Phosphate buffered saline (PBS)	Sigma-Aldrich	P4417	

eGFP-PCNA flies	Gift from S. Blythe and E. Wieschaus		
Sodium hypochlorite 13%	Thermo Fisher	AC219255000	
Triton X-100	AppliChem	A4975	
Tris buffer pH 8.0 (1 M) for molecular biology	AppliChem	A4577	
NaCl	AppliChem	A2942	
IGEPAL CA-630	Sigma-Aldrich	I8896	
1.5 mL microcentrifuge tubes	Greiner Bio-One	616201	
SDS for molecular biology	AppliChem	A2263	
10x CutSmart buffer	New England Biolabs	B7204S	Restriction enzyme buffer
PCR Nucleotide Mix	Sigma-Aldrich	11814362001	Unmodified dCTP, dGTP, dTTP
BSA, Molecular Biology Grade	New England Biolabs	B9000S	
EDTA 0.5 M solution for molecular biology	AppliChem	A4892	
Sodium acetate 3 M pH 5.2	Sigma-Aldrich	S7899	
DynaMag-2 Magnet	Life Technologies	12321D	Magnetic stand
Intelli-Mixer RM-2L	Omnilab	5729802	Rotator
ThermoMixer F1.5	Eppendorf	5384000012	Mixer
Small Embryo Collection Cages	Flystuff.com	59-100	Egg collection cage
Centrifuge 5424 R	Eppendorf	5404000413	
C1000 Touch Thermal Cycler	Bio-Rad	1851148	
PCR tube strips	Greiner Bio-One	673275	
NEBuffer 2.1	New England Biolabs	B7202S	T4 DNA Polymerase buffer