

Materials List for:

# High-throughput Identification of Gene Regulatory Sequences Using Next-generation Sequencing of Circular Chromosome Conformation Capture (4C-seq)

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URL: <https://www.jove.com/video/58030>

DOI: [doi:10.3791/58030](https://doi.org/10.3791/58030)

## Materials

Name	Company	Catalog Number	Comments
HindIII	NEB	R0104S	
CviQI	NEB	R0639S	
DNA oligonucleotide primers	IDT		To be designed by the reader
50 mL conical centrifuge tubes	Fisher Scientific	06-443-19	
1.7 mL microcentrifuge tubes	MidSci	AVSS1700	
Phosphate buffered saline	Thermo Fisher	14190-136	
Formaldehyde, methanol free	Electron Microscopy Sciences	15710	
Nutator	VWR	15172-203	
Glycine	JT Baker	4059-00	
Benchtop centrifuge			
Refrigerated microcentrifuge			
Ethylenediaminetetraacetic acid (EDTA)	Sigma-Aldrich	ED2SS	
20% SDS solution	Sigma-Aldrich	05030	
Trypan Blue	Thermo Fisher	15250061	
Glass slides	Fisher Scientific	12-550-143	
Cover slips	VWR	16004-094	
Light microscope			
Triton X-100	Alfa Aesar	A16046	
Shaking heat block			
2 M Tris-HCl	Quality Biological	351-048-101	
Proteinase K	NEB	P8107S	
Phenol:chloroform:isoamyl alcohol (25:24:1)	Sigma-Aldrich	P2069	
Sodium acetate	Sigma-Aldrich	M5661	
20 mg/mL glycogen	Thermo Fisher	R0561	
Ethanol	Fisher Scientific	04-355-223	
Nuclease-free water	Fisher Scientific	MT-46-000-CM	
qPCR cycler	Thermo Fisher	4453536	
qPCR plates	Thermo Fisher	4309849	
Thermocycler	Thermo Fisher	4375786	
PCR strip tubes	MidSci	AVSST-FL	
1 M Magnesium chloride	Quality Biological	351-033-721	

Dithiothreitol	Sigma-Aldrich	43815	
Adenosine triphosphate	Sigma-Aldrich	A2383	
T4 DNA Ligase	NEB	M0202S	
Agarose	Sigma-Aldrich	A6013	
RNase A	Thermo Fisher	EN0531	
Qiaquick PCR purification kit	Qiagen	28104	
MinElute PCR Purification kit	Qiagen	28004	
Spectrophotometer			
Expand Long Template PCR System	Sigma-Aldrich	11681834001	
dNTP mix	Thermo Fisher	R0191	
SYBR Green I	Sigma-Aldrich	S9430	
ROX	BioRad	172-5858	
Sodium chloride	Sigma-Aldrich	S5886	
End-It DNA End-Repair Kit	Lucigen	ER0720	
LigaFast Rapid DNA Ligation System	Promega	M8221	
SYBR Safe	Thermo Fisher	S33102	
Taq Polymerase	NEB	M0267S	
UltraSieve Agarose	IBI Scientific	IB70054	
Qiaquick Gel Extraction Kit	Qiagen	28704	