

Materials List for:

A Rat Methyl-Seq Platform to Identify Epigenetic Changes Associated with Stress Exposure

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URL: <https://www.jove.com/video/58617>

DOI: [doi:10.3791/58617](https://doi.org/10.3791/58617)

Materials

Name	Company	Catalog Number	Comments
Radioimmuno assay (RIA)	MP Biomedicals	7120126	Corticosterone, 125I labeled
Master Pure DNA Purification Kit	Epicentre/Illumina	MC85200	
Thermal-LOK 2-Position Dry Heat Bath	USA Scientific	2510-1102	Used with 1.5 mL tubes
Vortex Genie 2	Fisher	12-812	Vortex Mixer
Ethyl alcohol, Pure	Sigma-Aldrich	E7023	100% Ethanol, molecular grade
Centrifuge 5424 R	Eppendorf	-	Must be capable of 20,000 x g
Qubit 2.0	ThermoFisher Scientific	Q32866	Fluorometer
Qubit dsDNA BR Assay Kit	ThermoFisher Scientific	Q32850	
Qubit dsDNA HS Assay Kit	ThermoFisher Scientific	Q32851	High sensitivity DNA detection reagents
Qubit Assay Tubes	ThermoFisher Scientific	Q32856	
SureSelectXT Rat Methyl-Seq Reagent Kit	Agilent Technologies	G9651A	Reagents for preparing the Methyl-Seq library
SureSelect Rat Methyl-Seq Capture Library	Agilent Technologies	931143	RNA baits for enrichment of rat targets
IDTE, pH 8.0	IDT DNA	11-05-01-09	10 mM TE, 0.1 mM EDTA
DNA LoBind Tube 1.5 mL	Eppendorf	22431021	
Covaris E-series or S-series	Covaris	-	Isothermal sonicator
microTUBE AFA Fiber Pre-Slit Snap-Cap 6x16mm (25)	Covaris	520045	
Water, Ultra Pure (Molecular Biology Grade)	Quality Biological	351-029-721	
Veriti 96 Well-Thermal Cycler	Applied Biosystems	4375786	
AMPure XP Beads	Beckman Coulter	A63880	DNA-Binding magnetic beads
96S Super Magnet	ALPAQUA	A001322	Magnetic plate for purification steps
2200 TapeStation	Agilent Technologies	G2965AA	Electrophoresis-based bioanalyzer
D1000 ScreenTape	Agilent Technologies	5067-5582	
D1000 ScreenTape High Sensitivity	Agilent Technologies	5067-5584	
D1000 Reagents	Agilent Technologies	5067-5583	
D1000 Reagents High Sensitivity	Agilent Technologies	5067-5585	
DNA110 SpeedVac	ThermoFisher Scientific	-	Vacuum Concentrator
Dynabeads MyOne Streptavidin T1 magnetic beads	Invitrogen	65601	Streptavidin magnetic beads

Labquake Tube Rotator	ThermoFisher Scientific	415110Q	Nutator Mixer is also acceptable
EZ DNA Methylation-Gold Kit	Zymo Research	D5006	Bisulfite conversion kit. Contains Binding, Wash, Desulphonation, and Elution buffers
Illumina Hi-Seq 2500	Illumina	-	Next-generation sequencing machine
PCR and Pyrosequencing Primers	IDT DNA	Variable	
Taq DNA Polymerase with ThermoPol Buffer - 2,000 units	New England BioLabs	M0267L	
Deoxynucleotide (dNTP) Solution Set	New England BioLabs	N0446S	
Pyromark MD96	QIAGEN	-	Pyrosequencing machine
Ethyl Alcohol 200 Proof	Pharmco-Aaper	111000200	70% Ethanol solution
Sodium Hydroxide Pellets	Sigma-Aldrich	221465	0.2 M NaOH denature buffer solution
Tris (Base) from J.T. Baker	Fisher Scientific	02-004-508	10 mM Tris Acetate Buffer wash buffer solution
PyroMark Gold Q96 Reagents (50x96)	QIAGEN	972807	Reagents required for pyrosequencing
PyroMark Annealing Buffer	QIAGEN	979009	
PyroMark Binding Buffer (200 mL)	QIAGEN	979006	
Streptavidin Sepharose High Performance Beads	GE Healthcare	17-5113-01	Streptavidin-coated sepharose beads
PyroMark Q96 HS Plate	QIAGEN	979101	Pyrosequencing assay plate
Eppendorf Thermomixer R	Fisher Scientific	05-400-205	Plate mixer. 96-well block sold separately (cat. No 05-400-207)
SureDesign Website	Agilent Technologies	-	Target capture design software (https://earray.chem.agilent.com/suredesign/)
UCSC Genome Browser	University of California Santa Cruz	-	rat Nov 2004 m4 assembly
Agilent Methyl-Seq Protocol	Agilent Technologies	-	https://www.agilent.com/cs/library/usermanuals/public/G7530-90002.pdf