

Materials List for:

# Mapping Genome-wide Accessible Chromatin in Primary Human T Lymphocytes by ATAC-Seq

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## Materials

Name	Company	Catalog Number	Comments
50 mL tubes	Lumitron	LUM-CFT011500-P	Can be from other vendors.
Microtubes	Axygen Inc	MCT-175-C	Can be from other vendors.
25 mL serological pipettes	Corning Costar	4489	Can be from other vendors.
Tissue culture flask	Lumitron	LUM-TCF-012-250-P	Can be from other vendors.
Countes Automated Cell Counter	Invitrogen	C10227	
NucleoSpin Tissue	MACHEREY-NAGEL	740952.5	
Peripheral blood mononuclear cells (PBMC)	ATCC	PCS800011	Can be from other vendors.
RPMI 1640 Medium	Biological Industries	01-103-1A	Can be from other vendors.
L-Glutamine Solution (200 mM)	Biological Industries	03-020-1B	Can be from other vendors.
Penicillin-Streptomycin	Biological Industries	03-031-1B	Can be from other vendors.
Fetal Bovine Serum (FBS), Heat Inactivated, European Grade	Biological Industries	04-127-1	Can be from other vendors.
MACS CD4 microbeads, human	Miltenyi Biotec	130-045-101	
MACS MS columns	Miltenyi Biotec	130-042-201	
Anti-Human CD4 FITC	Biogems	06121-50	
Mouse IgG1 Isotype Control FITC	Biogems	44212-50	
Anti-Human CD3 (OKT3)	Tonbo biosciences	40-0037	
Anti-Human CD28 SAFIRE Purified	Biogems	10311-25	
Recombinant Human IL2	Peprtech	200-02	
Recombinant Human IL4	Peprtech	200-04	
Recombinant Human IL12 p70	Peprtech	200-12	
In Vivo Ready Anti-Human IL-4 (MP4-25D2)	Tonbo	40-7048	
LEAF Purified anti-human IFN-γ	BioLegend	506513	
NaCl, analytical grade	Carlo Erba	479687	Can be from other vendors.
Magnesium chloride, Hexahydrate, molecular biology grade	Calbiochem	442611	Can be from other vendors.
EDTA	MP Biomedicals	800682	Can be from other vendors.
Tris, ultra pure, 99.9% pure	MP Biomedicals	819620	Can be from other vendors.
NP-40 alternative (Nonylphenyl Polyethylene Glycol)	Calbiochem	492016	Can be from other vendors.
Protease Inhibitors	Sigma	P2714	this protease inhibitor cocktail is a powder. To make 100 x solution dilute in 1 mL of molecular-biology grade water.

Magnetic solid phase reverse immobilization beads: AMPure XP beads	Beckman	63881	
PCR purification kit	HyLabs	EX-GP200	Can be from other vendors.
Nextera DNA Library Preparation Kit (TDE1 transposase and TD buffer)	Illumina	FC-121-1030	
NEBNext High-Fidelity 2 x PCR Master Mix	New England BioLabs	M0541	
NEBNext Q5 Hot Start HiFi PCR Master Mix	New England BioLabs	M0543	
SYBR Green I	Invitrogen	S7585	
CFX Connect Real-Time PCR Detection System	Bio-rad	185-5200	Can be from other vendors.
CFX Manager Software	Bio-rad	1845000	
master mix for qPCR: iTaq Universal SYBR Green Supermix	Bio-rad	172-5124	Can be from other vendors.
Qubit fluorometer 2.0	Invitrogen	Q32866	
Qubit dsDNA HS Assay Kit	Invitrogen	Q32854	
Magnet for eppendorf tubes	Invitrogen	12321D	Can be from other vendors.
Swing bucket cooling centrifuge with the buckets for 15 mL falcon tubes and eppendorf tubes	Thermo Scientific	75004527	Could be from other vendors. It is important that it has buckets for eppendorf tubes.
Thermo-shaker	MRC		Can be from other vendors.
High Sensitivity D1000 ScreenTape	Agilent Technologies	5067-5584	
High Sensitivity D1000 Reagents	Agilent Technologies	5067-5585	
4200 TapeStation system	Agilent Technologies	G2991AA	Tape-based platform for electrophoresis
High Sensitivity DNA kit	Agilent Technologies	5067-4626	Reagent for high-sensitivity TapeStation analysis
Primer name and sequence	Company		
Ad1_noMX: 5'-AATGATACGGCGACCACCGAGA TCTACACTCGTCGGCAGCGTC AGATGTG-3'	IDT		Ad1-noMx: 5'-P5 sequence-transposase sequence-3'
Ad2.1_TAAGGCGA: 5'-CAAGCAGAAGACGGCATAACGAG AT[TCGCCCTTA]GTCTCTGTGGGC TCGGAGATGT-3'	IDT		Ad2.1_expected index sequence read: 5'-P7 sequence-[index sequence]-transposase sequence-3'
Ad2.2_CGTA TAG: 5'-CAAGCAGAAGACGGCATAACGAG AT[CTAGTACG]GTCTCTGTGGGC TCGGAGATGT-3'	IDT		Ad2.2_expected index sequence read: 5'-P7 sequence-[index sequence]-transposase sequence-3'
Ad2.3_AGGCAGAA: 5'-CAAGCAGAAGACGGCATAACGA GAT[TTCTGCCT]GTCTCTGTGGGC TCGGAGATGT-3'	IDT		Ad2.3_expected index sequence read: 5'-P7 sequence-[index sequence]-transposase sequence-3'
Ad2.4_TCCTGAGC: 5'-CAAGCAGAAGACGGCATAACGAG AT[GCTCAGGA]GTCTCTGTGGGC TCGGAGATGT-3'	IDT		Ad2.4_expected index sequence read: 5'-P7 sequence-[index sequence]-transposase sequence-3'
Ad2.5_GGACTCCT: 5'-CAAGCAGAAGACGGCATAACGA GAT[AGGAGTCC]GTCTCTGTGGG CTCGGAGATGT-3'	IDT		Ad2.5_expected index sequence read: 5'-P7 sequence-[index sequence]-transposase sequence-3'

Ad2.6_TAGGCATG: 5'- CAAGCAGAAGACGGCATAACGA GAT[CATGCCTA]GTCTCGTGGG TCGGAGATGT-3'	IDT		Ad2.6_expected index sequence read: 5'-P7 sequence-[index sequence]-transposase sequence-3'
Ad2.7_CTCTCTAC: 5'- CAAGCAGAAGACGGCATAACGA GAT[GTAGAGAG]GTCTCGTGGG CTCGGAGATGT-3'	IDT		Ad2.7_expected index sequence read: 5'-P7 sequence-[index sequence]-transposase sequence-3'
Ad2.8_CAGAGAGG: 5'- CAAGCAGAAGACGGCATAACGA GAT[CCTCTCTG]GTCTCGTGGG TCGGAGATGT-3'	IDT		Ad2.8_expected index sequence read: 5'-P7 sequence-[index sequence]-transposase sequence-3'
Ad2.9_GCTACGCT: 5'- CAAGCAGAAGACGGCATAACGA GAT[AGCGTAGC]GTCTCGTGGG TCGGAGATGT-3'	IDT		Ad2.9_expected index sequence read: 5'-P7 sequence-[index sequence]-transposase sequence-3'
Ad2.10_CGAGGCTG: 5'- CAAGCAGAAGACGGCATAACG AGAT[CAGCCTCG]GTCTCGTGG GCTCGGAGATGT-3'	IDT		Ad2.10_expected index sequence read: 5'-P7 sequence- [index sequence]-transposase sequence-3'
Ad2.11_AAGAGGCA: 5'- CAAGCAGAAGACGGCATAACG AGAT[TCCTCTT]GTCTCGTGGG CTCGGAGATGT-3'	IDT		Ad2.11_expected index sequence read: 5'-P7 sequence- [index sequence]-transposase sequence-3'
Ad2.12_GTAGAGGA: 5'- CAAGCAGAAGACGGCATAACG AGAT[TCCTCTAC]GTCTCGTGGG CTCGGAGATGT-3'	IDT		Ad2.12_expected index sequence read: 5'-P7 sequence- [index sequence]-transposase sequence-3'
Ad2.13_GTCGTGAT: 5'- CAAGCAGAAGACGGCATAACGA GAT[ATCACGAC]GTCTCGTGGG TCGGAGATGT-3'	IDT		Ad2.13_expected index sequence read: 5'-P7 sequence- [index sequence]-transposase sequence-3'
Ad2.14_ACCACTGT: 5'- CAAGCAGAAGACGGCATAACGA GAT[ACAGTGGT]GTCTCGTGGG TCGGAGATGT-3'	IDT		Ad2.14_expected index sequence read: 5'-P7 sequence- [index sequence]-transposase sequence-3'
Ad2.15_TGGATCTG: 5'- CAAGCAGAAGACGGCATAACGA GAT[CAGATCCA]GTCTCGTGGG TCGGAGATGT-3'	IDT		Ad2.15_expected index sequence read: 5'-P7 sequence- [index sequence]-transposase sequence-3'
Ad2.16_CCGTTTGT: 5'- CAAGCAGAAGACGGCATAACGA GAT[ACAAACGG]GTCTCGTGGG TCGGAGATGT-3'	IDT		Ad2.16_expected index sequence read: 5'-P7 sequence- [index sequence]-transposase sequence-3'
Ad2.17_TGCTGGGT: 5'- CAAGCAGAAGACGGCATAACGA GAT[ACCCAGCA]GTCTCGTGGG TCGGAGATGT-3'	IDT		Ad2.17_expected index sequence read: 5'-P7 sequence- [index sequence]-transposase sequence-3'
Ad2.18_GAGGGGTT: 5'- CAAGCAGAAGACGGCATAACGA GAT[AACCCCTC]GTCTCGTGGG TCGGAGATGT-3'	IDT		Ad2.18_expected index sequence read: 5'-P7 sequence- [index sequence]-transposase sequence-3'
Ad2.19_AGGTTGGG: 5'- CAAGCAGAAGACGGCATAACGA GAT[CCCAACCT]GTCTCGTGGG TCGGAGATGT-3'	IDT		Ad2.19_expected index sequence read: 5'-P7 sequence- [index sequence]-transposase sequence-3'
Ad2.20_GTGTGGTG: 5'- CAAGCAGAAGACGGCATAACGA GAT[CACCACAC]GTCTCGTGGG TCGGAGATGT-3'	IDT		Ad2.20_expected index sequence read: 5'-P7 sequence- [index sequence]-transposase sequence-3'

Ad2.21_TGGGTTTC: 5'- CAAGCAGAAGACGGCATAACGA GAT[GAAACCCA]GTCTCGTGGGC TCGGAGATGT-3'	IDT		Ad2.21_expected index sequence read: 5'-P7 sequence- [index sequence]-transposase sequence-3'
Ad2.22_TGGTCACA: 5'- CAAGCAGAAGACGGCATAACGA GAT[TGTGACCA]GTCTCGTGGGC TCGGAGATGT-3'	IDT		Ad2.22_expected index sequence read: 5'-P7 sequence- [index sequence]-transposase sequence-3'
Ad2.23_TTGACCCT: 5'- CAAGCAGAAGACGGCATAACGA GAT[AGGGTCAA]GTCTCGTGGGC TCGGAGATGT-3'	IDT		Ad2.23_expected index sequence read: 5'-P7 sequence- [index sequence]-transposase sequence-3'
Ad2.24_CCACTCCT: 5'- CAAGCAGAAGACGGCATAACGA GAT[AGGAGTGG]GTCTCGTGGG CTCGGAGATGT-3'	IDT		Ad2.24_expected index sequence read: 5'-P7 sequence- [index sequence]-transposase sequence-3'
F1: 5'- CCTTTTTATTTGCCCATACACTC-3'	IDT		
R1: 5'- CCCAGATAGAAAGTTGGAGAGG-3'	IDT		
F2: 5'- TTGAGGGATGCCATAACAGTC-3'	IDT		
R2: 5'- CTGCTGAACAACATCCTTAC-3'	IDT		
F3: 5'- GGTTTGCAGGTTGCGTTG-3'	IDT		
R3: 5'- AGAGGAATCTGGGAGTGACG-3'	IDT		
F4: 5'- TGCTCATTCCGTTTCCCTAC-3'	IDT		
R4: 5'- AGCCGAAAGAAAGTTCCTG-3'	IDT		