

Materials List for

T and B Cell Receptor Immune Repertoire Analysis using Next-generation Sequencing

Lael Werner^{1,2}, Chen Dor^{3,4}, Naomi Salamon¹, Meital Nagar^{3,4}, Dror S. Shouval^{1,2}

¹Pediatric Gastroenterology Unit, Edmond and Lily Safra Children's Hospital, Sheba Medical Center ²Sackler Faculty of Medicine, Tel Aviv University

³Cancer Research Center, Sheba Medical Center ⁴Molecular Hematology Laboratory, Sheba Medical Center

Corresponding Author

Lael Werner

wernerlael@gmail.com

Citation

Werner, L., Dor, C., Salamon, N., Nagar, M., Shouval, D.S. T and B Cell Receptor Immune Repertoire Analysis using Next-generation Sequencing. *J. Vis. Exp.* (), e61792, doi:10.3791/61792 (2021).

Date Published

January 12, 2021

DOI

10.3791/61792

URL

jove.com/video/61792

Materials

Name	Company	Catalog Number	Comments
2-propanol	Sigma	I9516-500ML	
1.7 mL micro-centrifuge tubes	Axygen	8187631104051	
15 mL centrifuge tubes	Greiner	188261	
Absolute ethanol	Merck	1.08543.0250	
Amplitaq Gold	Thermo Fisher	N8080241	
AMPure XP Beads	Beckman Coulter	A63881	
Heat block	Bioer	Not applicable	
High Sensitivity D1000 Sample Buffer	Agilent	5067-5603	For Tapestation
High Sensitivity D1000 ScreenTape	Agilent	5067-5584	For Tapestation. Tubes sold separately
Lymphotrack Assay kit	Invivoscribe	TRB: 70-91210039 IGH: 70-92250019	Each includes 24 indexes
MiSeq Reagent Kit v2 (500 cycle)	Illumina	MS-102-2003	Includes standard flow cell type and all reagents required
MiSeq Sequencer	Illumina	SY-410-1003	
PCR strips	4titude	4ti-0792	
Proteinase K	Invitrogen	EO0491	
Qubit 4 Fluorometer	Thermo Fisher	Q33226	
Qubit dsDNA HS Assay Kit	Thermo Fisher	Q32854	Includes buffer, dye, standards, and specialized tubes
Shaker	Biosan	Not applicable	
Tapestation 2100 Bioanalyzer	Agilent	G2940CA	
ultra pure water	Bio-lab	7501	
Wizard DNA isolation kit	Promega	A1120	Includes cell lysis solution, nuclei lysis solution, and protein precipitation buffer