




Aug 23, 2022


cDNA Library Preparation for scRNA-seq of Human Meniscus (10x Genomics)

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1 Works for me

 Share[dx.doi.org/10.17504/protocols.io.e6nvwkw32vmk/v1](https://doi.org/10.17504/protocols.io.e6nvwkw32vmk/v1)

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ABSTRACT

Samples are processed using V2 barcoding chemistry kits of 10x Genomics. For each run, 10,000 cells from individual donors are labeled with distinct oligo-barcoded antibodies (cell hashing), enabling us to pool samples from both conditions on each 10X Genomics run and reduce batch effects. All samples from a given experiment are processed in parallel in the same thermal cycler. The 10x user guide can be found https://assets.ctfassets.net/an68im79xiti/1C16trEdzy1Folq5xbOijE/7e6fb1f504e130bd561d898384da99d9/CG000315_ChromiumNextGEMSingleCell3-_GeneExpression_v3.1_DualIndex_RevB.pdf and is also an attached document.

ATTACHMENTS

[CG000315_ChromiumNext
GEMSingleCell3-
_GeneExpression_v3.1_Du
alIndex_RevC.pdf](#)

DOI

[dx.doi.org/10.17504/protocols.io.e6nvwkw32vmk/v1](https://doi.org/10.17504/protocols.io.e6nvwkw32vmk/v1)

PROTOCOL CITATION

molmer, Martin Lotz, Tony Mondala, Steven Head 2022. cDNA Library Preparation for scRNA-seq of Human Meniscus (10x Genomics) . **protocols.io** <https://protocols.io/view/cdna-library-preparation-for-scna-seq-of-human-mec5etg3e>

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CREATED

Aug 10, 2022

LAST MODIFIED

Aug 23, 2022

PROTOCOL INTEGER ID

68486

MATERIALS TEXT

Chromium Next GEM Single Cell 3' GEM Kit v3.1, 16 rxns PN-1000123
Library Construction Kit, 16 rxns PN-1000190
Chromium Next GEM Single Cell 3' Gel Bead Kit v3.1, 16 rxns PN-1000122
Dynabeads™ MyOne™ SILANE PN-2000048
Chromium Next GEM Chip G Single Cell Kit, 16 rxns PN-1000127
Dual Index Kit TT Set A, 96 rxns PN-1000215
BD Hu Single Cell Sample Multiplexing Kit cat# 633781

- 1 Single cells are isolated from human knee meniscus using doi [dx.doi.org/10.17504/protocols.io.n2bvj6k7blk5/v1](https://doi.org/10.17504/protocols.io.n2bvj6k7blk5/v1).
- 2 Single cell suspensions are multiplexed and converted to barcoded scRNAseq libraries using the Chromium Single Cell 3' Library, Gel Bead and Chip Kit (10x Genomics), and the [BD™ Hu Single Cell Sample Multiplexing Kit](#).

Chromium Next GEM Single Cell 3' Reagent Kits v3.1 (Dual Index) User Guide
https://assets.ctfassets.net/an68im79xiti/1C16trEdzy1Folq5xb0ijE/7e6fb1f504e130bd561d898384da99d9/CG000315_ChromiumNextGEMSingleCell3-GeneExpression_v3.1_DualIndex_RevB.pdf

- 3 Libraries are sequenced on an Illumina NextSeq2000 sequencer targeting 20,000-25,000 reads per cell.