

# U54 SCENT 10x Genomic Single-Cell Multiome

aren Abramson<sup>1</sup>, Simon Gregory<sup>1,2</sup>

<sup>1</sup>Duke Molecular Physiology Institute, Durham, NC, USA; Department of Neurology, Duke University, Durham, NC, USA

Cellular Senescence Network (SenNet) Method Development Community

AUG 16, 2023



valerie.bekker





### **ABSTRACT**

This document outlines the 10X Genomics Single-Cell Multiome Protocol used for normal lung and colon tissues for SCENT at Duke University.

#### DOI:

dx.doi.org/10.17504/protocol s.io.81wgbxdpolpk/v1

Protocol Citation: Karen Abramson, Simon Gregory 2023. U54 SCENT 10x Genomic Single-Cell Multiome. protocols.io https://dx.doi.org/10.17504/p rotocols.io.81wgbxdpolpk/v1

License: This is an open access protocol distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited

**Protocol status:** Working We use this protocol and it's working

Created: Jun 07, 2023

Last Modified: Aug 16,

2023

#### **PROTOCOL** integer ID:

83009

## **10X Gemonics Single-Cell Multiome Protocol**

- Nuclei were isolated using this 10x Genomics kit Chromium

  Nuclei Isolation with RNase Inhibitor Kit, 16rxns, and this protocol
- 2 Multiome libraries were generated using these kits -Chromium Next GEM Single Cell Multiome ATAC + Gene Expression Reagent Bundle and this protocol
- 3 Libraries were sequenced on Illumina sequencers to a read depth of at least 50k reads/nucleus for Gene Expression with read lengths of 28x10x10x90 and at least 25k reads/nucleus for ATAC with read lengths of 50x8x24x49.