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Visium Direct Mount Fresh Frozen -- University of Minnesota TMCs

DOI

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Cellular Senescence Net...



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Protocol status: Working

We use this protocol and it's working

Created: November 30, 2023

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Protocol Integer ID: 91658

Keywords: visium spatial gene expression, visium spatial gene expression solution, downstream visium spatial tissue optimization, 10x genomics visium spatial protocol, inputs for the downstream visium spatial tissue optimization, use with 10x genomics visium spatial protocol, visium spatial slide with intact tissue section, mrna in tissue section, total mrna in tissue section, gene expression, stained tissue section, visium spatial slide, university of minnesota genomics center, tissue section, minnesota genomics center, intact tissue section, total mrna, mrna, genomic, imaging of tissue, tissue, visium direct mount fresh frozen

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Abstract

The Visium Spatial Gene Expression Solution measures the total mRNA in tissue sections and requires a Visium Spatial slide with intact tissue sections as input. This protocol outlines methanol fixation, Hematoxylin & Eosin (H&E) staining, and imaging of tissue for use with 10x Genomics Visium Spatial protocols. Fixed and stained tissue sections are inputs for the downstream Visium Spatial Tissue Optimization and Visium Spatial Gene Expression workflows.

Tissue sections are processed with Visium Spatial Gene Expression assay performed by the University of Minnesota Imaging Center and sequenced by the University of Minnesota Genomics Center.



Tissue Optimization

- 1  CG000238 Rev E 10x FF Visium Sp... 4.4MB

Fixation, H&E Staining & Imaging

- 2  CG000160 Rev C 10x FF Visium Me... 1.2MB

Library Preparation & Sequencing

- 3  CG000239 RevF 10x FF Visium Spa... 6.6MB

Note

Illumina NovaSeq 6000 with read format 28/10/10/90

FASTQ Generation

- 4 BCL data from Illumina sequencer is demultiplexed and converted into FASTQ format using bcl2fastq version 2.20.0