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

Created: Nov 30, 2023

Visium Direct Mount Fresh Frozen -- University of Minnesota TMCs

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Cellular Senescence Network (SenNet) Method Development Community



Allie Pybas

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.

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Tissue Optimization

CG000238 Rev E 10x FF Visium Spatial Tissue Optimization.pdf4.4MB

Fixation, H&E Staining & Imaging

CG000160 Rev C 10x FF Visium Methanol Fixation and HE Staining.pdf 1.2MB

Library Preparation & Sequencing

CG000239 RevF 10x FF Visium Spatial Gene Expression User Guide.pdf 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