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Spatial Transcriptomics for OCT using 10x Genomics Visium

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Andrew Houston[1], Siqi Chen[1], Feng Chen[1]

[1]Department of Medicine, Washington University in St Louis

Andrew Houston
Washington University in St. Louis

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

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Abstract

To detect gene expression spatially mapped across a fresh-frozen tissue sample adapted from 10x Genomics Visium protocol.

Visium Fresh-Frozen

1 Start **here**
If performing OCT tissue embedding for the first time be sure to consult pgs.5-9
If utilizing a new tissue type for the first time be sure to utilize the Tissue Optimization Guide which can be found **here**

2 RNA extraction and assessment is outlined in the above guide but not always necessary
Most OCT blocks have preserved RNA quality well due to their preservation/storage

3 Perform all fixation/H&E staining/imaging steps on the Visium Spatial Gene Expression Slide (PN-2000233)
Utilize the guide **here**
Typically it is not necessary to utilize a coverslip while imaging

4 Immediately proceed to the Visium Library Construction
Start on pg. 35 using this guide **here**

5 Sequence the libraries according to the requirements on pg. 59 of CG000239