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## Spatial Transcriptomics for OCT using 10x Genomics Visium

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### ABSTRACT

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

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**protocols.io**

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

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75822**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