

Apr 28, 2025

Post-Xenium H&E staining and imaging protocol

DOI

dx.doi.org/10.17504/protocols.io.36wgqep6xgk5/v1

Joanna Bi¹, Chenchen Zhu¹, Thomas Karathanos¹, Rongduo Han¹

¹Stanford University

NCIHTAN

Human BioMolecular Atl...



Thomas Karathanos

Stanford University

Create & collaborate more with a free account

Edit and publish protocols, collaborate in communities, share insights through comments, and track progress with run records.

Create free account

OPEN  ACCESS



DOI: <https://dx.doi.org/10.17504/protocols.io.36wgqep6xgk5/v1>

Protocol Citation: Joanna Bi, Chenchen Zhu, Thomas Karathanos, Rongduo Han 2025. Post-Xenium H&E staining and imaging protocol. **protocols.io** <https://dx.doi.org/10.17504/protocols.io.36wgqep6xgk5/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



Created: April 28, 2025

Last Modified: April 28, 2025

Protocol Integer ID: 189166

Keywords: xenium spatial transcriptomic, imaging, imaging protocol, spatial transcriptomic

Abstract

We describe the process we followed for H&E imaging following the Xenium Spatial Transcriptomics assay.

Troubleshooting



Staining

- 1  10x_CG000613_Demonstrated_Prot... 2MB We used the guide provided by 10x Genomics for staining following a Xenium assay. Link:
https://cdn.10xgenomics.com/image/upload/v1704391942/support-documents/10x_CG000613_Demonstrated_Protocol_Xenium_H_EStaining_RevB.pdf

Imaging

- 2 After coverslipping and drying, image slides at 40X in brightfield.

Pre-processing

- 3  parse_ndpi.py 2KB After the images are captured, split images from TMA using imaging software or code. We used a Python script to split serial sections of each .ndpi image corresponding to different slides. Sample code is attached.

Protocol references

https://cdn.10xgenomics.com/image/upload/v1704391942/support-documents/10x_CG000613_Demonstrated_Protocol_Xenium_H_EStaining_RevB.pdf