10x GENOMICS

Quick Reference Cards | CG000623 | Rev D

Xenium

for Slide Cassette Assembly

For use with:

Xenium Slides & Sample Prep Reagents (2 slides, 2 rxns), PN-1000460

Xenium Prime Sample Preparation Reagents with Slides (2 rxns), PN-1000471

Xenium Prime Sample Preparation Reagents with Cell Segmentation with Slides (2 rxns), PN-1000742

Xenium Decoding Consumables (1 run, 2 slides), PN-1000487

Xenium Decoding Consumables v2 (1 run, 2 slides), PN-1000726



Xenium
Document Revision Summary

Document Number
CG000623 | Rev D

Title
Xenium Quick Reference Cards – Slide Cassette Assembly

Revision
Rev C to D

Revision Date
August 2025

Description of Changes
Added reference to Xenium In Situ Gene and Protein Expression assay (pg 3-4)
Updated references to Xenium In Situ - FFPE Tissue Preparation Handbook (CG000578) (pg 3)
Updated references to Xenium In Situ - Fresh Frozen Tissue Preparation Handbook (CG000579) (pg 3)
Updated for general minor consistency of language, format, and terms throughout

Contact:
support@10xgenomics.com
10x Genomics, Inc.
6230 Stoneridge Mall Road
Pleasanton, CA 94588 USA

© 2025 10x Genomics, Inc. (10x Genomics). All rights reserved. Duplication and/or reproduction of all or any portion of this document without the express written consent of 10x Genomics, is strictly forbidden. Nothing contained herein shall constitute any warranty, express or implied, as to the performance of any products described herein. Any and all warranties applicable to any products are set forth in the applicable terms and conditions of sale accompanying the purchase of such product. 10x Genomics provides no warranty and hereby disclaims any and all warranties as to the use of any third-party products or protocols described herein. The use of products described herein is subject to certain restrictions as set forth in the applicable terms and conditions of sale accompanying the purchase of such product. A non-exhaustive list of 10x Genomics' marks, many of which are registered in the United States and other countries can be viewed at: www.10xgenomics.com/trademarks. 10x Genomics may refer to the products or services offered by other companies by their brand name or company name solely for clarity, and does not claim any rights in those third-party marks or names. 10x Genomics products may be covered by one or more of the patents as indicated at: www.10xgenomics.com/patents. All products and services described herein are intended FOR RESEARCH USE ONLY and NOT FOR USE IN DIAGNOSTIC PROCEDURES.

The use of 10x Genomics products in practicing the methods set forth herein has not been validated by 10x Genomics, and such non-validated use is NOT COVERED BY 10X GENOMICS STANDARD WARRANTY, AND 10X GENOMICS HEREBY DISCLAIMS ANY AND ALL WARRANTIES FOR SUCH USE. Nothing in this document should be construed as altering, waiving or amending in any manner 10x Genomics terms and conditions of sale for the Chromium Controller or the Chromium Single Cell Controller, consumables or software, including without limitation such terms and conditions relating to certain use restrictions, limited license, warranty and limitation of liability, and nothing in this document shall be deemed to be Documentation, as that term is set forth in such terms and conditions of sale. Nothing in this document shall be construed as any representation by 10x Genomics that it currently or will at any time in the future offer or in any way support any application set forth herein.

Xenium and Xenium Prime
Slide Cassette

Xenium Cassette & Xenium Cassette v2

Use appropriate Xenium Cassette based on assay workflow performed. Xenium Cassette v2 is used for the Xenium Prime workflow only.

The Xenium Cassette and Xenium Cassette v2 vary in design and individual elements between the two cannot be combined.

Inspect and confirm correct Xenium Cassette top and bottom pair prior to starting assay workflow. Key parts critical for function and specific differences between cassettes are depicted in the figure on the right.

- **Xenium Cassette** is used with Xenium In Situ Gene Expression (CG000582), Xenium In Situ Gene Expression with Cell Segmentation Staining (CG000749), and Xenium In Situ Gene and Protein Expression with Cell Segmentation Staining User Guide (CG000819).
- **Xenium Cassette v2** is used with Xenium Prime In Situ Gene Expression with optional Cell Segmentation Staining (CG000760).

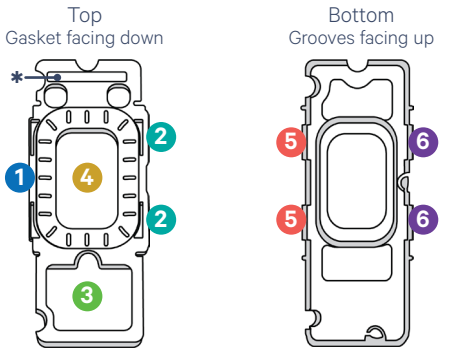
The following instructions describe the assembly and disassembly of the Xenium Cassettes. The assembled cassette consists of the Xenium slide and slide cassette (top and bottom). The assembled Xenium Cassette acts to encase the slide and create a leakproof well for adding reagents.

Gaskets are used to create a sealed well around tissue and corresponds to the Sample Area etched on the slide.

Assemble slide into the cassette flat on a clean work surface. Wipe the back of the slide before assembling cassette.

Refer to the Xenium In Situ - FFPE Tissue Preparation (CG000578) and Xenium In Situ - Fresh Frozen Tissue Preparation (CG000579) Handbooks for further guidance.

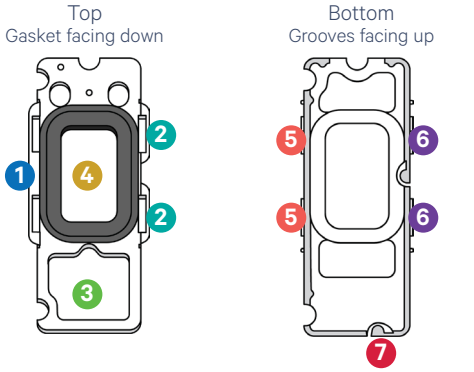
Xenium Cassette
(Use with Xenium v1 Assays and Xenium Protein)



1 Outer Clips 3 Label Window 5 Outer Tabs
2 Inner Clip 4 Gasket (white) 6 Inner Tabs

** "Xenium Top" printed here. Not found on v2 Cassettes*

Xenium Cassette v2
(Use with Xenium Prime Assays)



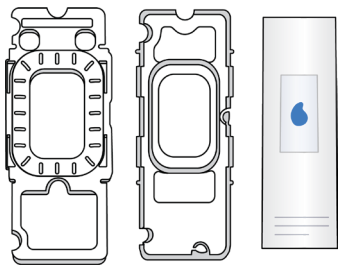
1 Outer Clips 3 Label Window 5 Outer Tabs
2 Inner Clip 4 Gasket (black) 6 Inner Tabs
7 Slide Clip

Xenium Cassette
(Use with Xenium v1 and Xenium Protein)

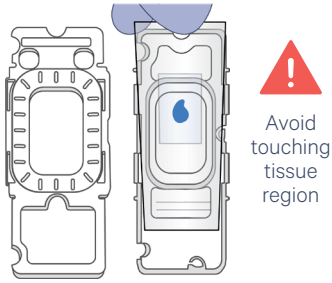
Follow instructions carefully. Incorrect assembly of the Xenium Cassette with a Xenium slide can negatively impact assay performance.

Assembly

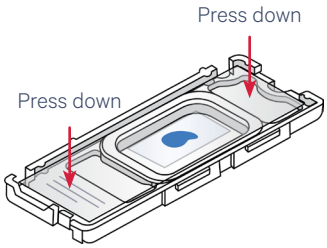
1 Place cassette top and bottom halves on the bench with the top cassette facing down and bottom cassette facing up.



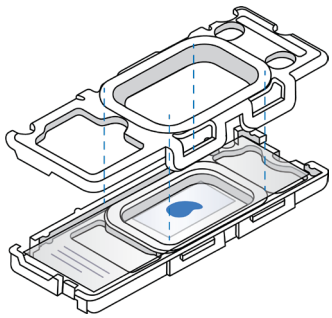
2 Place Xenium slide with label at bottom and tissue facing up into bottom half of cassette.



3 Press slide down into grooves of the bottom half of the cassette until it sits firmly in place.

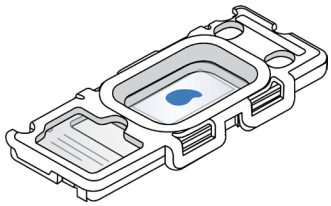


4 Align top to bottom. Secure clips of top half with tabs of bottom half (on both sides).



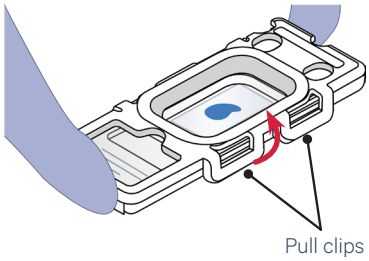
5 Apply even pressure on top of cassette until all clips click shut. Verify that clips are completely secured over tabs.*

**Consult Xenium In Situ Gene Expression User Guide (CG000582) for cassette assembly failures.*

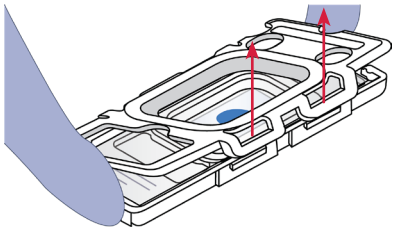


Removal

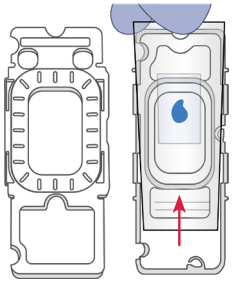
1 Pull inner clips from inner tabs to detach top and bottom halves of cassette.



2 Open cassette by continuing to lift inner clips of top cassette upward.



3 Hold top of slide and carefully lift slide out from bottom half.

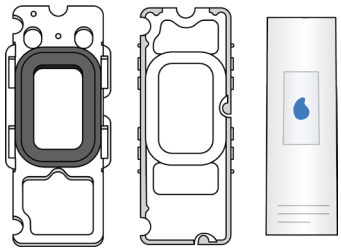


Xenium Cassette v2
Use with Xenium Prime

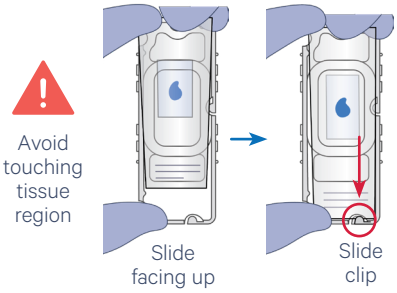
Follow instructions carefully. Incorrect assembly of the Xenium Cassette with a Xenium slide can negatively impact assay performance.

Assembly

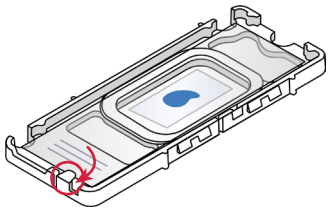
1 Place cassette top and bottom halves on the bench with the top cassette facing down and bottom cassette facing up.



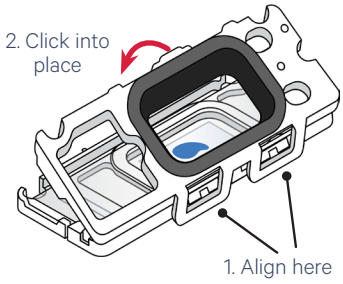
2 Place Xenium slide with label at bottom and tissue facing up into bottom half of cassette. Slip slide under slide clip located at bottom right of cassette.



3 After slide is safely underneath slide clip, place the opposite side down into carrier. Ensure slide is sitting flat.

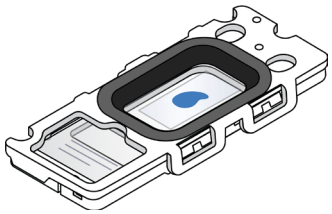


4 Align inner clips of top cassette to inner tabs of bottom cassette. Bring opposite side down until 2 audible clicks are heard.



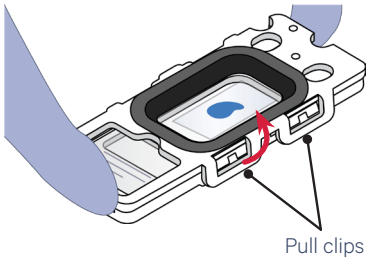
5 Verify that clips are completely secured over tabs. Top cassette should sit flat and no gaps should be visible around entire cassette.*

**Consult Xenium Prime In Situ Gene Expression with optional Cell Segmentation Staining User Guide (CG000760) for cassette assembly failures.*

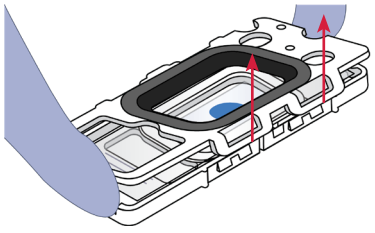


Removal

1 Pull inner clips from inner tabs to detach top and bottom halves of cassette.



2 Open cassette by continuing to lift inner clips of top cassette upward.



3 Hold the top of the slide and slowly lift slide out from underneath the slide clip. Then slowly remove from bottom cassette

