

Quick Reference Cards | CG000623 | Rev C

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 C

Title

Xenium Quick Reference Cards – Slide Cassette Assembly

Revision

Rev B to C

Revision Date

June 2024

Specific Changes

Added overview information about Xenium Cassette v2 (pg 3)
Updated Xenium Cassette information for consistency (pg 3-4)
Added Xenium Cassette v2 assembly and disassembly instructions (pg 5)

General Changes

Updated illustrations, formatting and overall organization to include greater detail and align with current standards.

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Xenium and Xenium Prime Slide Cassette Assembly

Xenium Cassette & Xenium Cassette v2

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

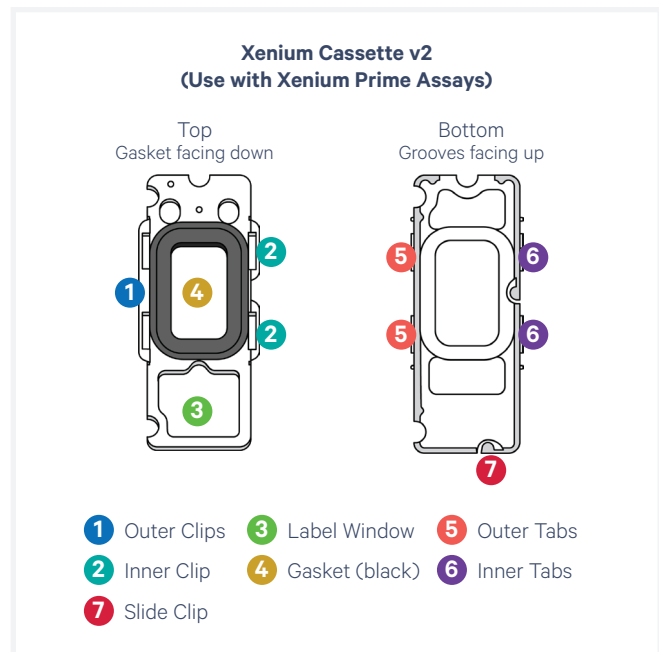
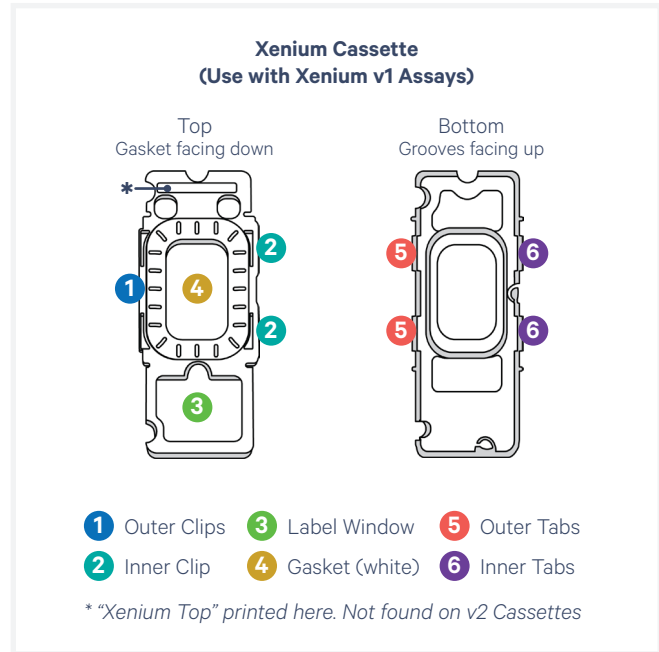
- **Xenium Cassette** is used with Xenium In Situ Gene Expression (CG000582) and Xenium In Situ Gene Expression with Cell Segmentation Staining (CG000749).
- **Xenium Cassette v2** is used with Xenium Prime In Situ Gene Expression with optional Cell Segmentation Staining (CG000760).

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 for FFPE - Deparaffinization & Decrosslinking (CG000580) and Xenium In Situ for Fresh Frozen - Fixation & Permeabilization (CG000581) Demonstrated Protocols for further guidance.



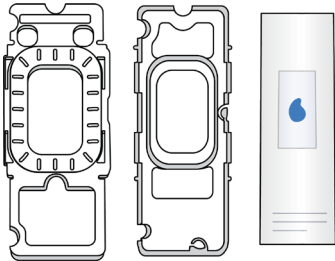
Xenium Cassette (Use with Xenium v1)

Slide Cassette Assembly

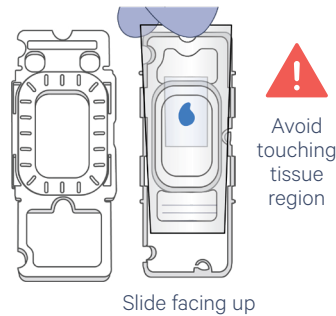
Follow instructions carefully. Incorrect assembly of the Xenium Cassette with a Xenium slide can negatively impact assay performance.

Assembly

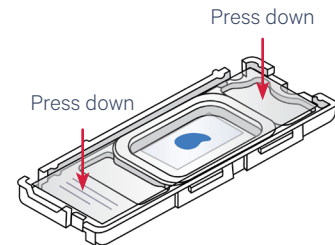
- 1** Place cassette top and bottom halves on the bench with the top cassette facing down and bottom cassette facing up.



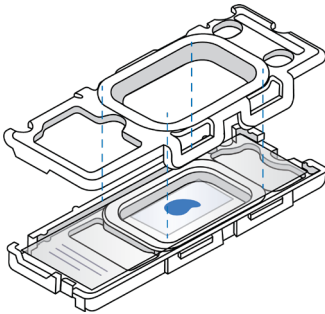
- 2** Place Xenium slide with label at bottom and tissue facing up into bottom half of cassette.



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

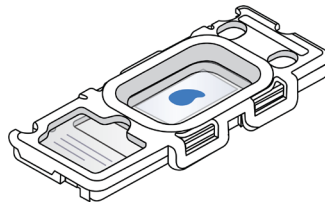


- 4** Align top to bottom. Secure clips of top half with tabs of bottom half (on both sides).



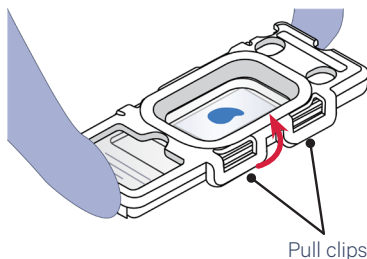
- 5** Apply even pressure on top of cassette until all clips click shut. Verify that clips are completely secured over tabs.*

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

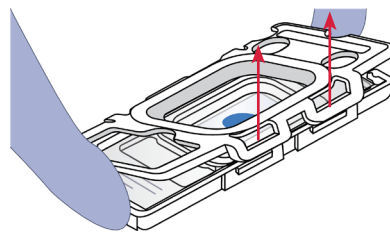


Removal

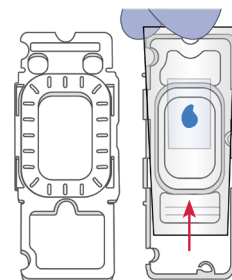
- 1** Pull inner clips from inner tabs to detach top and bottom halves of cassette.



- 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.



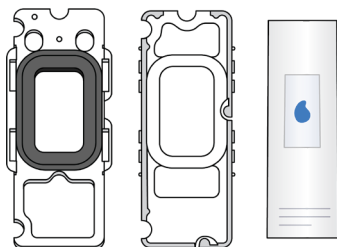
Xenium Cassette v2 (Use with Xenium Prime)

Slide Cassette Assembly

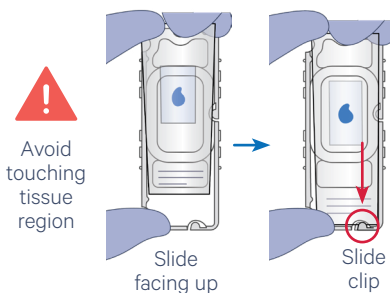
! Follow instructions carefully. Incorrect assembly of the Xenium Cassette with a Xenium slide can negatively impact assay performance.

Assembly

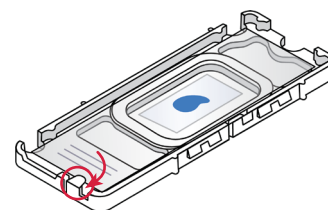
1 Place cassette top and bottom halves on the bench with the top cassette facing down and bottom cassette facing up.



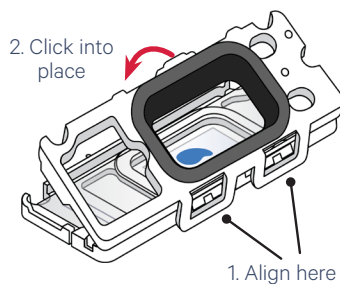
2 Place Xenium slide with label at bottom and tissue facing up into bottom half of cassette. Slip slide under slide clip located at bottom right of cassette.



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

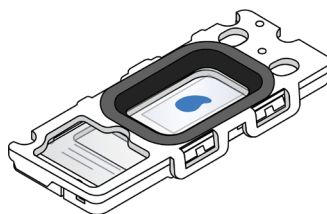


4 Align inner clips of top cassette to inner tabs of bottom cassette. Bring opposite side down until 2 audible clicks are heard.



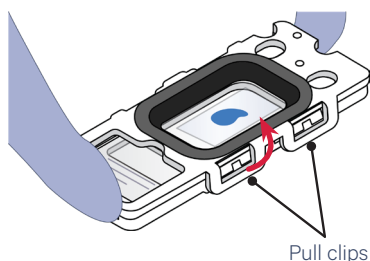
5 Verify that clips are completely secured over tabs. Top cassette should sit flat and no gaps should be visible around entire cassette.*

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

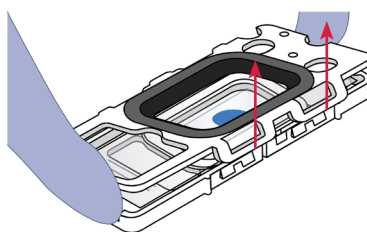


Removal

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

