

Quick Reference Cards | CG000548 | Rev F

Visium CytAssist

for Instrument Accessory Kit Instruction

For use with:

Visium CytAssist & Accessory Kit

12-Month Warranty, PN-1000441 / 24-Month Warranty, PN-1000442

Visium CytAssist Instrument Accessory Kit, PN-1000433

Visium CytAssist, Refurbished, PN-1000432R

Visium CytAssist Alignment Aid, 6.5 mm, PN-1000886



If printing this document:

Select "A5 paper size" or "100%" to print to scale. Measure slide diagrams to verify.

Visium CytAssist

Document Revision Summary



Document Number

CG000548 | Rev F

Title

Visium CytAssist Quick Reference Cards –
for Instrument Accessory Kit Instruction

Revision

Rev E to Rev F

Revision Date

August 2025

Description of Changes

- Reorganized and expanded instruction on alignment aid use on page 6.
- Added information on tracing the alignment aid square window to pages 6 and 8.
- Moved instructions on tracing the alignment marks to page 7.

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.

Visium CytAssist

Tissue Slide Alignment (25 mm width)



Use this guide to determine if the tissue section is located in an area that results in successful analyte transfer and imaging. Overlay the slide on the appropriate square in (A). Proceed to the appropriate diagram in (B).

Compatibility:	Slide Width		Capture Area	
Visium	25 mm	26 mm	6.5 mm	11 mm
HD	✓	✓	✓	⊘
HD 3'	✓	✓	✓	⊘
v2	✓	⊘	✓	✓

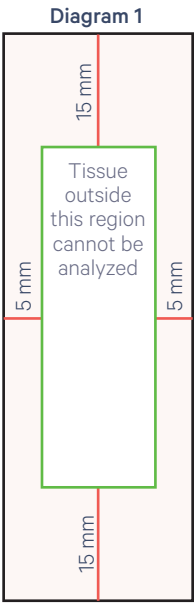
See product-specific documentation for details.

A Ensure that the tissue section will fit within the Capture Area of a Visium Slide. Only the tissue within the boundary will be processed by the instrument. Overlay the slide, centering the tissue on either square.



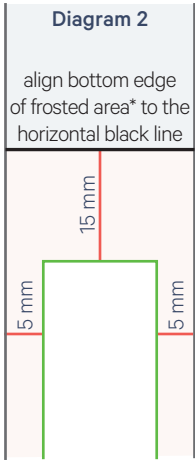
B If slide has no frosted areas, overlay on diagram 1.

Tissue should lie within the green allowable area:
15 mm from top and bottom edges
5 mm from the sides

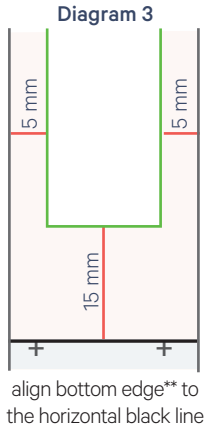


If slide has a frosted end and/or marks, overlay on diagram 2 and then on diagram 3.

Check the allowable area from both the top (diagram 2) and bottom (diagram 3) to ensure the tissue lies within the green allowable area (area is variable due to variability in the dimensions of frosted areas across slide brands):
15 mm from edge of frosted area/marks
5 mm from the sides



*If text is present below frosted area of slide, align bottom of the letters to the line



**If markings are present at bottom edge of slide, align markings to the + signs

Visium CytAssist

Tissue Slide Alignment (26 mm width, 1 of 2)



Use this guide to determine if the tissue section is located in an area that results in successful analyte transfer and imaging. Overlay the slide on the square in (A). Proceed to the appropriate diagram in (B) or (C).

Compatibility:	Slide Width		Capture Area	
Visium	25 mm	26 mm	6.5 mm	11 mm
HD	✓	✓	✓	⊗
HD 3'	✓	✓	✓	⊗
v2	✓	⊗	✓	✓

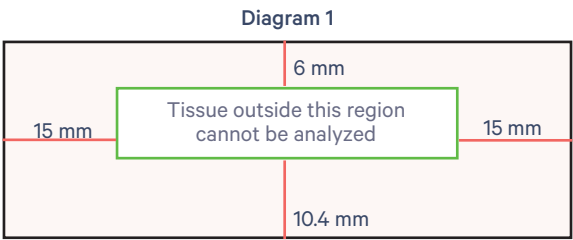
See product-specific documentation for details.

A Ensure that the tissue section will fit within the Capture Area of a Visium Slide. Only the tissue within the boundary will be processed by the instrument. Overlay the slide, centering the tissue on the square.



B If slide has no frosted areas, rotate 180° as needed and overlay on diagram 1.

Tissue should lie within green allowable area:
15 mm from top and bottom edges
6 mm from one side and **10.4 mm** from the other



See next page for (C), if slide has a frosted end and/or marks.

Visium CytAssist

Tissue Slide Alignment (26 mm width, 2 of 2)

Compatibility:	Slide Width		Capture Area	
	25 mm	26 mm	6.5 mm	11 mm
Visium				
HD	✓	✓	✓	⊘
HD 3'	✓	✓	✓	⊘
v2	✓	⊘	✓	✓

See previous page for (B), if slide has no frosted areas.

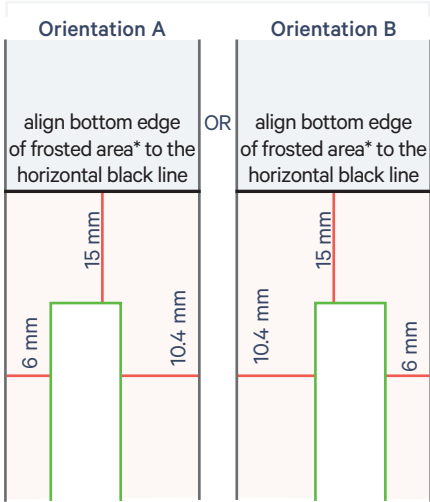
See product-specific documentation for compatibility details.

C If slide has a frosted end and/or marks, overlay on diagram 2 and then diagram 3.

Choose orientation A or B, depending on the location of the tissue on the slide (placement of the slide on the instrument slide stage is independent of this orientation). Check the allowable area from both the top (diagram 2) and bottom (diagram 3) to ensure the tissue lies within the green allowable area (*area is variable due to variability in the dimensions of frosted areas across slide brands*):

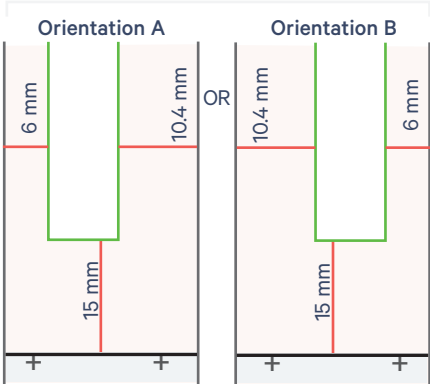
- 15 mm from frosted area/marks
- 6 mm from one side and 10.4 mm from the other

Diagram 2



*If text is present below frosted area of slide, align bottom of the text to the line

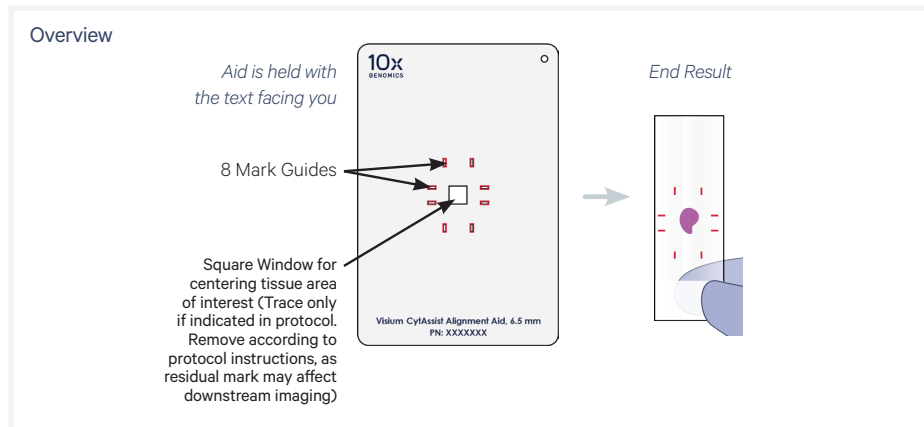
Diagram 3



align bottom edge** to the horizontal black line

**If markings are present at bottom edge of slide, align markings to the + signs

The “Visium CytAssist Alignment Aid, 6.5 mm” (PN-1000886; available for purchase separately) is an optional accessory used to annotate the back of the tissue slide to assist with alignment onto the Visium CytAssist instrument. Consult specific assay documentation for the appropriate timing.



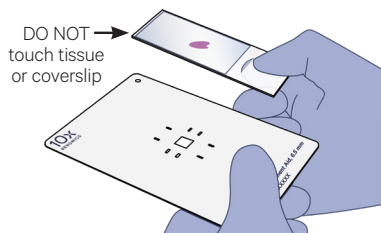
- Use aid when indicated in the protocol.
- In some workflows, the aid may be used to annotate the square window to assist in gasket placement during tissue slide cassette assembly. This annotation must be removed after cassette assembly. Refer to the protocol for indications on when to add and remove the square window annotation.
- Marks drawn by tracing the “mark guides” shown in the image above on the back of the slide using the aid will not affect downstream CytAssist imaging.
- Before use:
 - Verify tissue placement using the previous Tissue Slide Alignment pages.
 - Ensure back of tissue slide is dry.
 - If a coverslip is present, remove excess mounting medium from the slide by gently touching the slide to a lint-free laboratory wipe.
 - Clean aid with 70% isopropanol or 70% ethanol.
 - Obtain a permanent, ultrafine-tipped, dark-colored marker.
- During use:
 - If a coverslip is present, do not move coverslip.
 - Draw multiple passes for each mark.
 - Allow ink to dry for ~5 min.
- Once marks are drawn, avoid wiping the back of the slide vigorously to prevent mark removal. Instead, tap the back of the slide onto a lint-free laboratory wipe to remove excess moisture.

Visium CytAssist

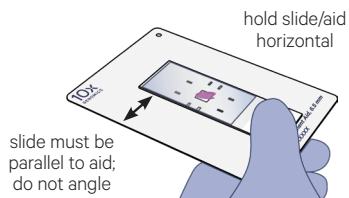
Alignment Aid, Tracing Mark Guides

Trace the mark guides on the Alignment Aid to assist in tissue slide alignment. Refer to assay-specific documentation for instructions on when to trace the mark guides.

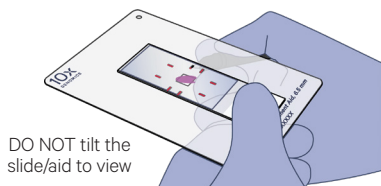
- 1 Hold the Alignment Aid in one hand horizontally, with the text oriented towards you. In the other hand, hold the tissue slide (tissue facing up) by the frosted end.



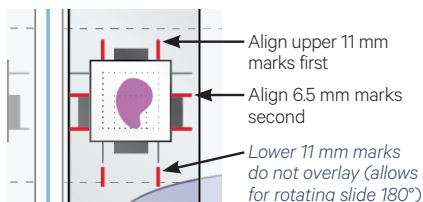
- 2 Position the slide on top of the aid, with the tissue area of interest centered on the square window. Move thumb to secure the slide against the aid.



- 3 Select a permanent ultrafine-tipped marker (dark color). Trace through the Mark Guides from the BACK of the Aid onto the back of the slide. DO NOT trace the window. Draw multiple passes for each mark. Allow ink to dry for ~5 min.



- 4 Proceed through the protocol steps to Tissue Slide Loading (onto the instrument). Match the drawn annotations on the back of the tissue slide to the alignment guides on the Tissue Slide Stage.



Visium CytAssist

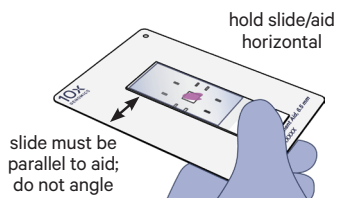
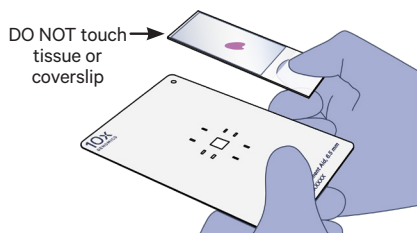
Alignment Aid, Tracing Square Window



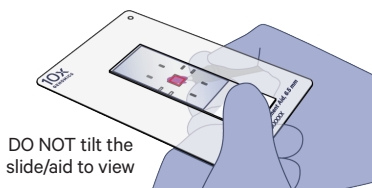
Only trace square window when directed. Only some workflows support tracing the square window.

The square window on the Alignment Aid may be traced to assist with tissue slide cassette assembly. Refer to assay-specific documentation for instructions on when to trace the square window. Marks made by tracing the square window will affect downstream CytAssist imaging and must be removed prior to the instrument run. The protocol will indicate when to remove the square window annotation.

- 1 Hold the Alignment Aid in one hand horizontally, with the text oriented towards you. In the other hand, hold the tissue slide (tissue facing up) by the frosted end.
- 2 Position the slide on top of the aid, with the tissue area of interest centered on the square window. Move thumb to secure the slide against the aid.



- 3 Select a permanent ultrafine-tipped marker (dark color). Trace the square window from the BACK of the Aid onto the back of the slide. Draw multiple passes for each mark. Allow ink to dry for ~5 min.



Visium CytAssist

Instrument Alignment *(manual)*

Ensure the tissue on each slide fits within the allowable area of the Tissue Slide Stage. Align tissue to the center of the alignment guides for 6.5 mm (rectangles) or 11 mm (lines) capture areas in **(A)** on either the left or right side of the stage.

If necessary, rotate the slide 180°, as shown in **(B)**. Place off-center tissues closer to the center line. Slides should not cross/overlap the center line.

Consult [Visium CytAssist Instrument User Guide with Readiness Test \(CG000542\)](#) & [Visium CytAssist Training Kit User Guide \(CG000549\)](#).

