Aug 30, 2024

# Preparing 10X Genomics CytAssist FFPE Sections

DOI
**dx.doi.org/10.17504/protocols.io.n92ldme3ol5b/v1**

YuHong Fu[1,2], Glenda Halliday[1,2]

[1]Brain and Mind Centre & Faculty of Medicine and Health School of Medical Sciences, The University of Sydney, Sydney, NSW 2050, Australia;
[2]Aligning Science Across Parkinson's (ASAP) Collaborative Research Network, Chevy Chase, MD, 20815

YuHong Fu
USTD

OPEN ACCESS

**DOI: dx.doi.org/10.17504/protocols.io.n92ldme3ol5b/v1**

**Protocol Citation:** YuHong Fu, Glenda Halliday 2024. Preparing 10X Genomics CytAssist FFPE Sections. **protocols.io https://dx.doi.org/10.17504/protocols.io.n92ldme3ol5b/v1**



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

**Created:** January 11, 2024

**Last Modified:** August 30, 2024

**Protocol Integer ID:** 93359

**Keywords:** FFPE, 10X, Sectioning, ASAPCRN

**Funders Acknowledgement:**
**The Michael J. Fox Foundation for Parkinson's Research (MJFF) and the Aligning Science Across Parkinson's (ASAP) initiative**
**Grant ID: ASAP-020529**
**The Michael J. Fox Foundation for Parkinson's Research (MJFF) and the Aligning Science Across Parkinson's (ASAP) initiative**
**Grant ID: ASAP-020505**

## Abstract

Designing and properly mounting FFPE sections on large-window CytAssist slides is important for downstream analysis and data quality. This protocol describes the key steps for this preparation.

## Set-up before cutting FFPE sections

1 Clean the surface of the bench area, microtome (HistoCore MULTICUT R, Leica), Water bath (HI1210, Leica), and tools (including forceps and blades) with 80% ethanol. 10m

2 Spray RNase Zap™ (Thermo Fisher Scientific) on the surface of the bench area, instruments, and tools and leave them to completely dry before use. 30m

3 Filled the Water bath with RNAse/DNAse free water and set the temperature at 40°C. 30m

## Cut FFPE sections 1d 4h 15m

4 Cut FFPE sections at 6um thickness.
Note: The time cost indicated for this step is for one FFPE block. 15m

5 Mount sections in the center region (< 11mm x 11mm) of the poly-prep slide according to the 10X genomics analysis requirement.
Note: The time cost for this step is experiment task-dependent. 4h

6 Incubated mounted sections at 42°C for 3 h and dried overnight at room temperature in a desiccator. 1d

7 Ready for downstream CytAssist procedure.