

VISIUM FFPE ASSAY

Highly multiplex Spatial Transcriptomics

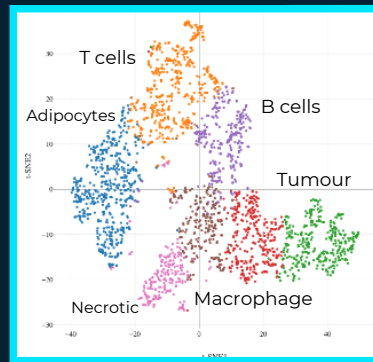
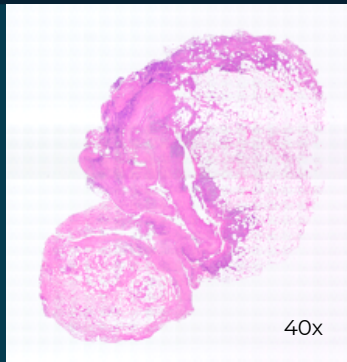
*for tissue-wide whole transcriptome
profiling in human and mouse samples*

10x GENOMICS®

Capabilities and applications

Optimised for FFPE sections

Utilizes standard H&E or immunofluorescence staining to visualize tissue morphology



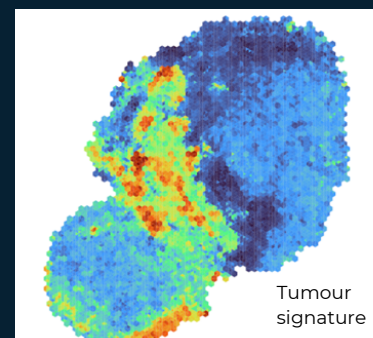
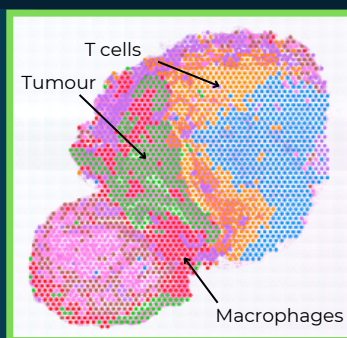
Gene expression profiling

Up to 20,000 genes

Cell identification based on gene expression signatures

Cell mapping

Automated projection of identified cells on to the tissue image



Functional characterisation

- Differential gene expression analysis
- Biomarker discovery
- Cell interactions
- Tissue microenvironments

Please turn over for service info.

The Visium FFPE assay is available as a complete end-to-end integrated service to all researchers.

This workflow was developed collaboratively between advanced specialists from the Westmead genomics, histology, cell imaging, biobanking and bioinformatics core facilities, 10x Genomics and the Liver Immunology Group at WIMR.

CONTACT US

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VISIUM FFPE SERVICE

What we require:



Visium slide

Up to 4 FFPE blocks per slide

4 sections can be run per slide

Tissue size < 6.5 x 6.5mm

Larger sections can be
trimmed to fit capture area

What we provide:

- Project consultation
- Labour and consumables
- Instrument operation
- Sample and data QC
- Bioinformatics support
- Publication quality figure production

SERVICE INCLUSIONS PER SLIDE



TISSUE PREPARATION

Includes sectioning, HE stain and decoverslipping. Additional cost (\$20 per sample) will apply to sectioning of extra blocks for pathological review and RNA QC



FFPE SECTION QC

Includes RNA extraction from sectioned FFPE tissue and RNA quantitation and integrity assessment. Additional cost (\$230 per sample) will apply to RNA QC of extra blocks



IMAGING

Includes brightfield image acquisition and processing



VISIUM FFPE ASSAY

Includes probe hybridisation and ligation, library construction and library QC



SEQUENCING

Includes sequencing on Illumina Novaseq SP 100 cycle flow cell (50bp PE)



DATA ANALYSIS

Includes Spaceranger alignment, counting & QC; Seurat data exploration, clustering, differential expression analysis & data vis as well as pathway analysis & celltype scoring

Please contact us to receive a customised quote