

FFPE Multi-Omics for Translational Oncology

Rapid proof-of-mechanism & target engagement insights.

Translational oncology teams must show that a therapeutic engages its target and modulates downstream pathways in patient tissue. Yet:

Archival trial biopsies yield limited molecular data.

Fresh tissue sampling is impractical for most studies.

Mechanistic and pharmacodynamic (PD) signals are **split across platforms.**

Sapient's **FFPE Multi-Omics Platform** enables **quantitative, translational proteogenomics.**

From a 5 µm FFPE section, Sapient **quantifies** >10,000 protein groups, including phospho- and glyco-proteins, splice isoforms, and cleavage variants – revealing insights into tumor signaling, immune activation, target engagement, pathway modulation, and pharmacodynamic effects with single protein and pathway-level resolution.

Through Sapient's DynamlQ™ virtual biobank, we can offer translational teams streamlined access to thousands of annotated FFPE samples to retrospectively test mechanistic hypotheses or correlate pathway activation with clinical response.

The result?

Uncertainty around proof-of-mechanism and delayed go/no-go decisions.

- 10,000+ protein groups measured, including phospho- and glyco-proteins, across tissue & tumor types
- Measure of 200+ oncogenes,
 500+ approved drug targets,
 and 100+ pathways
- Quantitative measure of drug tissue distribution
- Streamlined access to actionable FFPE tissue and tumor samples via Sapient's DynamiQ virtual biobank

Multi-omic molecular mapping

Our FFPE proteomics seamlessly integrates with other omics offerings available through Sapient, including:







FFPE DNA sequencingfor mutation and
CNV mapping



sequencing
for cell-type
specific expression



Spatial profiling for tissue contextualization

Designed to **accelerate translational oncology**, Sapient's FFPE Multi-Omics Platform provides a **comprehensive molecular map of the tumor**, **immune**, **and stromal compartments in one dataset**.

Typical Bottleneck	Sapient Solution	Program Impact
Limited patient tissue	Rapidly access thousands of outcome-linked FFPE tumor samples	Rapid retrospective validation
Limited PD measures	Quantitative measure of target pathway activation and modulation	Functional PD confirmation
Limited pathway insight	Automated analytics pipelines	Faster mechanism readouts
Fragmented omics vendors	Single multi-omic workflow	Faster integrated insight

Proceed with confidence.

Through deep, quantitative profiling, Sapient's FFPE proteomics enables **comprehensive detection of hundreds of oncogenic and immune signaling pathways**, enabling quantification of target engagement and mechanistic translation with:

- Confirmation of pathway modulation
- Cross-validation in existing FFPE samples with linked metadata (histopathology, clinical outcomes)

Enable rapid proof-ofmechanism and earlier dose and target engagement decisions with Sapient's FFPE Multi-Omics Platform.

For prioritized access opportunities, contact discover@sapient.bio.