



# Discovery proteomics for deep coverage and high throughput.

Sapient is a biomarker discovery organization providing **high throughput discovery proteomics services to measure thousands of proteins** in blood and tissue.

Leveraging state-of-the-art mass spectrometry, our methods **achieve high analytical specificity while optimizing for protein coverage and throughput** to best suit your bioanalytical needs.

## Mass spectrometry measure of proteins and proteoforms.

Our mass spectrometry approach annotates proteins and post-translational modifications (PTMs) via direct peptide sequencing. **Peptide-level information** enables precise protein identification, and **capture of PTMs** allows for more in-depth analysis of protein function and regulation.

The additional value is that Sapient's discovery proteomics services are scalable. **Choose the coverage depth and throughput** that aligns with your specific study objectives.



### Our approaches

#### Sapient /HT/ Discovery

Our fastest high throughput method, **ideal for large-scale studies** seeking to analyze thousands of samples per week.

#### Sapient /Core/ Discovery

Our core method that assays **>4,000 circulating proteins in plasma and serum, including PTMs**, with rapid turnaround.

#### Sapient /Deep/ Discovery

Optimized for **cell- and tissue-based studies** when the deepest proteome coverage is required.



## High-Throughput Profiling

with next-gen analytical technologies

Sapient's discovery proteomics methods use **nanoLC coupled to trapped ion mobility mass spectrometry and nanoparticle enrichment** to measure thousands of proteins across diverse bioanalytical pathways.



**Breadth and depth of coverage**  
of proteins and PTMs across the blood & tissue proteome



**Applicable to liquid & tissue matrices**  
including from preclinical and clinical systems



**Scalability and customization**  
from tens to thousands of samples

## Biocomputational Analysis

with multi-omics data integration

Our data science team can provide **integrative analysis of proteomics data** with metabolomics, lipidomics, and genomics data as well as preclinical and clinical inputs to elucidate protein biomarkers and their involvement in the dynamic processes underlying disease and drug response.



**Expert handling of large-scale datasets**  
using advanced statistical & machine learning models



**Identification of key protein biomarkers**  
with mapping of phenotype & genotype associations

The biomarkers we discover for sponsors can be applied to align:

### Right Disease

- Target ID and validation
- Disease mechanisms
- Early disease detection
- Disease progression

### Right Patient

- Patient stratification
- Safety profiling
- Companion diagnostics
- Clinical trial enrichment

### Right Therapy

- Dosing strategies
- Timing of treatments
- Target engagement
- Toxicology



**CAP**  
ACCREDITED  
COLLEGE of AMERICAN PATHOLOGISTS

Your partner to **discover more and develop faster.**

We are here to **extend multi-omics insights for your drug development programs beyond the genome**, to dynamic protein, metabolite, and lipid biomarkers that elucidate factors modulating health, disease, and drug response.

  
**SAPIENT**

**Ready to discover more?**

Schedule a time to discuss your programs with our scientists.

**Visit:** [sapient.bio](https://sapient.bio) | **Email:** [discover@sapient.bio](mailto:discover@sapient.bio) | **Call:** 858.290.7010