

Fox[®] Radical Protein Footprinting Services

When Drug Discovery Decisions Matter, Get Experimental Answers You Can Trust



Where does my drug bind?

Did my therapeutic engage its intended target?

How did binding change protein structure?

Are these biologics structurally comparable?

Can I trust my AI model?

GenNext Structural Biology Services

Experimental Structural Evidence for Biotherapeutics, Small Molecules & AI-Driven Drug Discovery

Every successful drug discovery program depends on making confident scientific decisions. Whether developing biotherapeutics, advancing small molecule therapeutics, or evaluating AI-generated drug candidates, researchers need experimental evidence that reduces uncertainty and guides the next critical decision.

GenNext delivers that evidence through our proprietary Fox Radical Protein Footprinting (FRPF) platform. By measuring residue-level structural changes with exceptional sensitivity while requiring only minimal sample quantities, we rapidly answer the structural biology questions that matter most, helping scientists move promising programs forward with greater confidence.

Answer Critical Questions for Biotherapeutics

- Epitope & Paratope Mapping**
 Determine precisely where therapeutic antibodies bind and identify the interaction surfaces that drive efficacy, specificity, and mechanism of action.
- Biosimilarity Assessment**
 Compare innovator biologics and biosimilars to identify meaningful structural differences arising from manufacturing, formulation, or process changes.
- AI Biotherapeutic Discovery**
 Experimentally evaluate competing AI-generated structural hypotheses early in discovery, allowing computational predictions to be validated with real-world structural evidence before significant resources are committed.



Better Small Molecule Decisions

- Target Engagement & Response**
 Confirm that candidate molecules engage their intended targets while revealing how binding changes protein structure and function.
- Lead Optimization & Structure-Activity Relationships**
 Determine whether chemical modifications preserve target engagement and structural response, enabling more informed lead optimization and medicinal chemistry decisions.



Why Drug Discovery Teams Partner with GenNext

Scientific Confidence. Rapid Answers. Transparent Collaboration

Drug discovery moves quickly, and every experimental result influences the next decision. GenNext provides high-quality structural biology services designed to answer critical scientific questions rapidly, transparently, and with the scientific rigor required for confident decision making.



Experimental Evidence You Can't Get Elsewhere

Our FRPF platform provides residue-level structural information that complements traditional structural biology techniques while delivering answers faster and using significantly less sample than many legacy methods.



Accelerate Scientific Decisions

Receive actionable structural biology data within days to weeks rather than months, enabling faster design-build-test cycles and helping promising therapeutic programs advance with greater confidence.



Scientific Partnership from Start to Finish

Our scientists work directly with your team—from project design through data interpretation—to ensure your experimental objectives remain the focus throughout every stage of the engagement.

Flexible Services for Every Organization

Whether you're an emerging biotech, established pharmaceutical company, contract research organization, or AI-enabled drug discovery company, GenNext adapts each project to your specific scientific objectives.

Ideal for organizations that:

- Need expert structural biology support for mission-critical programs
- Require rapid answers to therapeutic target engagement and structural response questions
- Lack in-house protein footprinting or biological mass spectrometry capabilities
- Prefer immediate access to specialized expertise without investing in new instrumentation



Better structural evidence leads to better scientific decisions. GenNext delivers rapid, residue-level experimental insights that reduce uncertainty, accelerate drug discovery, and help research teams move promising therapeutic programs forward with confidence.

Our Six-Step Process from Consultation to Answers

Seamless, Flexible & Fast from Start-to-Finish

At GenNext, we can deliver results within days to a few weeks of receiving your samples. Our services are built for agility, whether you need answers for a single study or a comprehensive, extended analytical partnership. You always get the expertise, reliability, and answers you require with our client-focused process, as follows:

1. Initial Consultation

Our team qualifies your needs via a brief questionnaire, setting the stage for a successful and efficient collaboration.

2. Needs Assessment Meeting

We take a deep dive into your scientific questions and assess how our science, technology, and scientists can help get you the answers you need.

3. Custom Solution Design

Our team then scopes the project by defining deliverables, timeline, and required sample information, ensuring clarity and alignment.

4. Transparent Quotation & Statement of Work

Then you will receive a project quotation detailing the specific experiments, deliverables, and payment terms. Once the quote is approved, a Statement of Work and contract will be executed.

5. FRPF Therapeutic Study

After we receive your samples and buffers, we begin methods development and proceed to the Fox Radical Protein Footprinting study. Checkpoint meetings occur to review critical results that keep us on track.

6. Fast Analysis & Reporting

Finally, we produce a clear, detailed, and actionable report that informs the next steps in your drug discovery and development process.

Our track record speaks for itself—trusted by industry leaders and up-and-coming pioneers alike. When it comes to biotherapeutic and small molecule protein characterization, along with AI model validation, GenNext stands apart as your expert partner from discovery to development.



Expert Analysis & Actionable Reporting

More than Just Data—You Get Answers

When you partner with GenNext, you get clear, concise answers to your most pressing structural biology questions. Our final deliverable is a detailed report that includes:

Experimental Design & Methodologies

The report provides a clear summary of how your unique research question was tackled, along with a description of the methods, workflow, and techniques utilized.

Raw & Analyzed Results

According to the research methodology, the report will illustrate protein dose response, sequence coverage, peptide- and residue-level oxidation, and differential study results. Publication- and presentation-worthy figures are included, such as histograms, volcano plots, heatmaps, and protein structure maps (if available). Additionally, you can access the raw data files and the full set of processed tables to perform further analyses and to augment your datasets.

Expert Review of Structural Implications

Whether the location of an epitope or paratope, detailed aggregation profiles, or a direct assessment of drug-target binding, the report provides the answer you seek. At the report presentation meeting, we help interpret the results with your team to understand structural changes, interaction surfaces, and relevant mechanistic insights.



Trusted by Innovators

From small biotechs to global pharmaceutical leaders, our clients trust us for a partnership mindset focused on their success.

- Strong track record of quickly delivering high-quality, actionable insights
- Proven cutting-edge technology combined with scientific excellence
- Flexible, transparent, and seamless partnership model



Accelerate Discovery, Advance Protein Therapeutics

*When rapid structural insights matter, choose GenNext
for your advanced protein footprinting studies.*