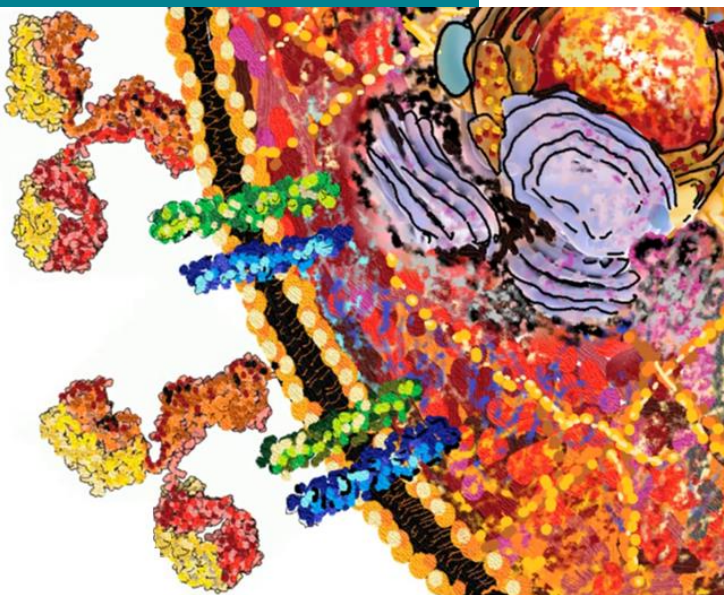


Biotech Services

Tailored solutions for your
unique needs to deliver
impactful and transformative
results

R&D services
across diverse
areas such as
biotechnology,
engineering, and
nanotechnology



Services

Biotechnology R&D services



Customized Solutions: We understand that every research project is unique. Our team works closely with clients to develop tailored solutions that address specific challenges and accelerate progress.

Expertise in Biotech: Our team comprises experts in various fields, allowing us to provide comprehensive R&D services across diverse areas, such as biotechnology, engineering, and nanotechnology

Commitment to Innovation: We are constantly exploring new technologies and methodologies to ensure our clients benefit from the latest advancements in research and development.

Immunoassay Development Services

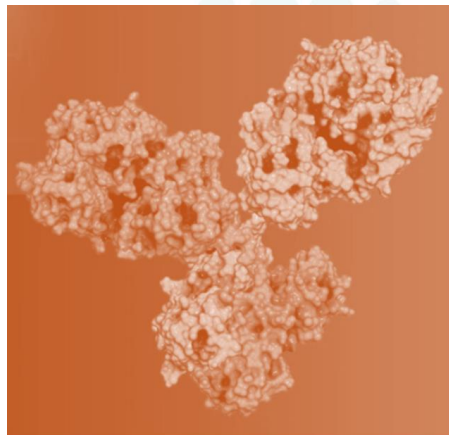
- Design of sandwich-based immunoassays
- Protein immobilization
- Surface chemistry design
- Antibody affinity and avidity testing
- Antibody pair screening
- Diluent and buffer design
- IVD products testing

Nanoparticle Functionalization & Characterization Services

- Nanoparticle functionalization
- Nanoparticle characterization
- Nanometrology of chemical surfaces
- Quantification of molecule concentrations attached nanoparticles and surfaces

Project Roadmap: We have designed a project roadmap to ensure a phased approach to success. Learn more:

<https://mecwins.com/services/project-roadmap/>



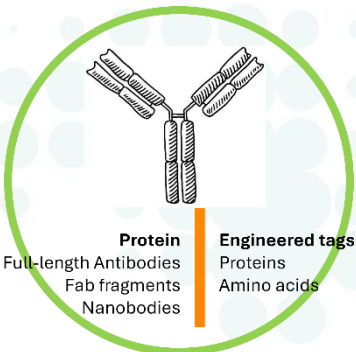
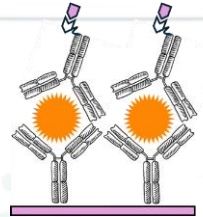
Services

Immunoassay Development

<https://mecwins.com/services/immunoassay-development-services/>

Customized Sandwich-Based Immunoassay Design

- We specialize in designing sandwich-based immunoassays tailored to detect your specific targets of interest, ensuring precise and reliable results.
- Our assays are compatible with both, conventional ELISA platforms and AVAC technology giving you flexible detection options.



Protein Immobilization Services

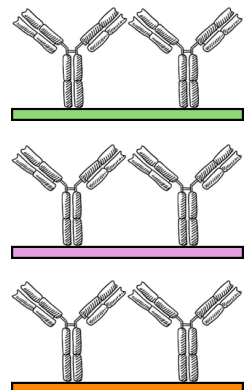
- We provide expert services in attaching antibodies to surfaces, achieving highly dense and oriented immobilization, maximizing the effectiveness of your assay.
- Our team also specializes in attaching unique tags to antibodies, reducing non-specific binding and improving the accuracy of your results.
- Immobilization can be applied across a wide range of materials, providing versatility & customization based on your project requirements.

Antibody Affinity and Avidity Testing Services

- We assess the strength of interactions between antibodies and their specific target epitope to help you select the best antibodies for your specific assays, ensuring high sensitivity and specificity.

Antibody Pair Screening Services

- We help identify the most effective antibody pairs for capturing and detecting your target antigens, ensuring optimal performance of your immunoassay.
- Our screening process evaluates key parameters such as specificity, sensitivity, and background noise, providing you with accurate and dependable results.



Reagent Selection and Validation

- Our experts assist in selecting or designing the reagents (e.g., diluents, buffers) that are most appropriate for your specific immunoassay, ensuring robust performance.
- We also provide feasibility assessments for proprietary or commercially sourced reagents, giving you confidence in selecting the best candidates to move forward with in your development process.

Product Testing Services

- We conduct comprehensive feasibility studies on your products using a variety of human biofluids, helping you validate the performance and reliability of your diagnostic tests in real-world conditions.

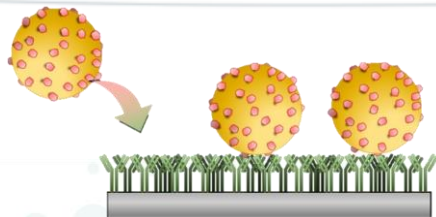
Services

Nanoparticle Functionalization & Characterization

<https://mecwins.com/services/nanoparticle-functionalization-characterization-services/>

Nanoparticle Functionalization Services

- We offer specialized functionalization of nanoparticles for bioassay development, supporting a range of applications including lateral flow, microfluidic-based, and other test kits.
- Our team ensures precise functionalization to meet your assay's specific requirements, optimizing performance and reliability.

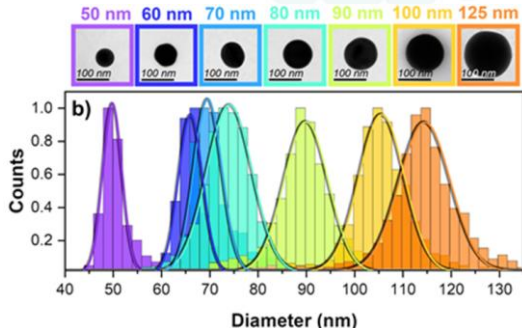


Nanoparticle Characterization Services

- Comprehensive characterization of nanoparticles, including analysis of concentration, size distribution, and aggregation state, ensuring quality and consistency in your NP preparations.
- We use "Dark-Field Single Particle Spectrophotometry" [1] & "Amplitude-Resolved Single Particle Spectrophotometry" [2] (proprietary techniques), to characterize plasmonic NPs.
- We offer novel characterization techniques for plasmonic-magnetic nanoparticles. [3]
- Additionally, we offer high-resolution SEM (Scanning Electron Microscopy) imaging to provide detailed structural insights.

Quantification of Molecule Concentrations

- We accurately quantify the concentrations of various molecules attached to both surfaces and nanoparticles, such as antibodies, streptavidin, -COOH groups, and more.
- Our services ensure precise measurements, providing you with the confidence to move forward with your research or product development.



Nanometrology of Chemical Surfaces

- Our experts can accurately characterize chemical and biological layers with sub-nanometer resolution, providing critical quality control (QC) data to ensure consistency and reliability in surface functionalization for your applications.

"We understand that every research project is unique. Our team works closely with clients to develop tailored solutions that address specific challenges and accelerate progress."

Interested? Tell us more about your application!"

Mecwins S.A.

Ronda de Poniente, 15, 2ºD
C.P.: E-28760
Tres Cantos (Madrid), Spain
Tel: +34 91 804 9064
www.mecwins.com

More Information:

services@mecwins.com