# **Novel Platforms at Creative Biolabs Show Improvement in Natural Autoantibody Paratope and Epitope Mapping**

With a series of innovative and diversified NAA platforms, Creative Biolabs now introduces NAA epitope mapping and paratope mapping services to worldwide customers.

**New York, New York City, Aug 22, 2021 (Issuewire.com)** - With the continuous development of modern immunological theories and technologies, the understanding of innate immunity and autoimmunity continues to update. Especially since the 1990s, as an important part of natural humoral immunity, natural autoantibodies (NAA) are receiving more and more attention from scholars.

"With the development of high throughput technologies and complementary advanced sequencing technologies, natural autoantibodies can be detected in blood samples from patients or healthy people, and this guarantees a wide range of clinical applications," as introduced by an expert at Creative Biolabs, "for example, natural autoantibodies can bind to cell surface antigens on malignant cells, discriminating early cancer from healthy tissue, thus playing an important role in immune surveillance against cancers."

With a series of innovative and diversified NAA platforms, Creative Biolabs has updated NAA epitope mapping and paratope mapping services, using various mapping methods to help worldwide customers achieve precise and fast detection in research on disease diagnosis and treatment.

## NAA Epitope Mapping

Creative Biolabs' epitope mapping service can help identify the binding site or epitope of an antibody on its target antigen, promoting the discovery and development of new therapeutics, vaccines, and diagnostics.

The NAA epitope mapping can be skillfully accomplished through various methods, covering X-ray c-crystallography and cryogenic electron microscopy (cryo-EM), array-based oligo-peptide scanning (overlapping peptide scan or Pepscan analysis), site-directed mutagenesis mapping, high-throughput shotgun mutagenesis epitope mapping, hydrogen-deuterium exchange, cross-linking-coupled mass spectrometry, yeast display, phage display, and limited proteolysis.

## NAA Paratope Mapping

The scientist team at Creative Biolabs is proficient in paratope mapping service to characterize the binding sites, or paratopes of antibodies recognized by antigens, dedicated to facilitating NAA discovery especially in the prediction of suitable antigens as vaccine components, the exploration of the immune response and autoimmunity, and the characterization of the therapeutic antibody's mechanism of action

For NAA paratope mapping, Creative Biolabs provides hydrogen-deuterium exchange and mass spectrometry, a computational procedure composed of rigid body docking, free and steered molecular dynamics (MD) simulations, and homology modeling, and peptide-based approaches for antibodies with very huge phage libraries available.

The experienced expert team promises timely and cost-effective delivery of high specificity and precision analysis used for both linear and conformational epitopes with low sample consumption and few handling steps.



Further information can be found on <a href="https://www.creative-biolabs.com/natural-autoantibody/">https://www.creative-biolabs.com/natural-autoantibody/</a>.

#### **About Creative Biolabs**

With an unrelenting drive in bio-science research and industry, Creative Biolabs has successfully developed a new range of natural autoantibody (NAA) platforms to provide fast and convenient NAA services, covering NAA detection, NAA profiling, <a href="NAA">NAA</a> affinity measurement, and NAA epitope/paratope mapping. A portfolio of premade or custom NAA products is also available.

### **Media Contact**

Candy Swift

marketing@creative-biolabs.com

Source: Creative Biolabs

See on IssueWire