Creative Biolabs Announces Non-IgG Production & Purification Services to Boost Therapeutic Antibody Discovery

With the established expression system platform, Creative Biolabs has widely explored novel and effective technologies and strategies for the production and purification of non-IgG antibodies covering IgA, IgM, and IgE isotypes.

New York, New York City, Oct 19, 2021 (Issuewire.com) - In 1986, the monoclonal antibody muromonab was approved by the U.S. Food and Drug Administration (FDA) for the treatment of acute transplant rejection, which is the first therapeutic antibody to be used as a drug in humans. Since then, the discovery of therapeutic antibodies has flourished, contributing new therapies for the treatment of cancer, autoimmune diseases, and inflammatory diseases.

Non-IgG antibodies, such as IgA, IgE, and IgM, have shown significant promise in disease therapy, clinical diagnostics, and vaccine development, but due to obstacles in large-scale production and purification, the development and discovery seem to lag behind. Creative Biolabs is actively involved in the research of non-IgG antibodies aiming to identify more effective therapeutic candidates, and now announces brand-new non-IgG therapeutics antibody production and purification services to worldwide clients.

• IgA Production and Purification

Scientists at Creative Biolabs have designed a robust IgA expression system, covering the full range of cell lines, which are broadly used for preparing and optimizing IgA antibodies to achieve better clinical efficacy and repeatability in various diseases therapies.

The purification technique is also critical for obtaining purified IgA for fundamental research or therapeutic use. At Creative Biolabs, lectin chromatography, affinity chromatography, exchange chromatography, and ligand peptide chromatography are all available options for IgA purification.

• IgM Production and Purification

Using recombinant DNA technology and the innovative Expression System Platform, Creative Biolabs has produced, purified, and optimized a diverse array of IgM antibodies in a number of species. Traditional hybridoma technology (both hetero-hybridomas and human-human hybridomas), which may involve a modification before direct cell fusion, is also available for IgM production.

IgM has a low affinity for protein A/G, as well as a limited solubility and poor stability, making IgM purification difficult. Creative Biolabs is proficient in IgM purification procedures such as the three-step strategy (CHT/AIX/CIX), two-step approach (PEG/AIX), size exclusion chromatography (SXC), and capture select.

• IgE Production and Purification

Creative Biolabs leverages signal cell cloning to create high-quality IgE antibodies. Once the sequence or antigen is given, the workflow starts with gene synthesis, vector construction, and plasmid preparation. Then the IgE antibodies could be produced in large quantities after transient transfection, selection, and cloning.

For IgE purification, affinity chromatography column purification, ion-exchange chromatography, liquid chromatography, size-exclusion chromatography, and a combination of these techniques are all available.

Further information can be found at https://non-igg-ab.creative-biolabs.com/.

About Creative Biolabs

Empowered by leading technology and years of experience in biomedical science, Creative Biolabs is skilled at providing therapeutic non-IgG antibody-related services with the help of the cutting-edge Antibody GlycoOpitimize Platform and Expression System Platform. The one-stop services range from non-IgG antibody discovery, engineering, production, and purification to characterization and PK/PD evaluation.

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