CD Bioparticles Launches Custom Services and Assay Kits for Detecting Cytokines with Homogeneous Luminescence Assay

CD Bioparticles launches custom services and specialized kits designed for detecting cytokines with Homogeneous Luminescence Assay.

NEW YORK, NY, UNITED STATES, June 25, 2026 /EINPresswire.com/ -- With years of experience in the pharmaceutical and life science sectors, CD Bioparticles has announced the expansion of its immunology portfolio with the official launch of its high-throughput custom services and specialized kits designed for detecting cytokines with Homogeneous Luminescence Assay. This advanced chemiluminescence platform is engineered to accelerate research in immunotherapy, vaccine development, and drug discovery by eliminating the bottlenecks of traditional enzyme-linked immunosorbent assays (ELISA).

Cytokines are a class of small-molecule proteins that are secreted by cells. They include interleukins, interferons, tumour necrosis factors, growth factors and chemokines. They bind to corresponding receptors on effector cells, thereby initiating signal transduction. Cytokines are well-established to play a key role in immune responses such as infection, inflammation, haematopoiesis, maintenance of homeostasis, tissue repair, cell development, growth and tumorigenesis. Dysfunction or dysregulation of cytokines has been associated with a wide range of diseases.

Cytokines can be used to characterize pathological conditions, infections or injuries, and they can even be employed to assess disease progression. Consequently, cytokine detection is of significant importance in basic immunological research, exploring disease mechanisms, diagnosing diseases, developing vaccines and cell therapy. One of the most commonly used methods is the ELISA. However, this method is cumbersome, time-consuming and susceptible to various factors.

To overcome these limitations, CD Bioparticles has developed a series of homogeneous luminescent cytokine detection kits. This technology significantly simplifies operational workflows, reducing labour and time costs while enabling the rapid, accurate, quantitative detection of cytokines in cell culture supernatants or serum samples. CD Bioparticles offers development and testing services for homogeneous luminescent cytokine assay kits to meet the diverse needs of researchers.

Compared to ELISA, homogeneous luminescence assays offer several advantages for cytokine detection. For example, there is no need for repeated washing steps: samples simply need to be added and incubated prior to testing. Results are obtained more rapidly with higher throughput, making the method better suited to automated processes. Furthermore, they offer higher sensitivity and a wider dynamic range whilst presenting a lower risk of interference. They also require smaller sample volumes and offer greater sample compatibility, making them suitable for natural samples such as cell culture supernatants and serum.

CD Bioparticles offers custom services to assist researchers in detecting various cytokines using homogeneous luminescence technology. These services cover every stage, from sample testing and custom conjugation to developing complete homogeneous luminescence assay methods. They include cytokine detection services, development of homogeneous luminescence assay kits, custom conjugation of antibodies/antigens with ligands and receptors, and assay validation.

For more information regarding CD Bioparticles' services for detecting cytokines with homogeneous luminescence assay or to discuss custom study protocols, please visit the official service platform at https://www.cd-bioparticles.com/services/detecting-cytokines-with-homogeneous-luminescence-assay.html.

About CD Bioparticles

CD Bioparticles is a leading manufacturer and supplier of various nanoparticles, microparticles, and coatings for R&D as well as commercialization across different application areas, including in vitro diagnostics, biochemistry, cellular analysis, cell separation, and immunoassay. The company also offers various custom services, including chemical surface-functionalization, fluorescent modification, antibody immobilization, as well as nucleic acid and oligo conjugation to meet client specifications.

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