

China's Duoning Biotech to commercialise single-cell sorting system for antibody discovery

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To support researchers in precise manipulation and efficient screening of single cells



Duoning Biotechnology Group, a leading one-stop bioprocess provider in China, has announced a strategic partnership with US-based Bioelectronica, a company focusing on developing tools for single-cell/single-bacteria research.

This partnership aims to enhance the global commercialisation of the high-throughput single-cell sorting system Hypercell and other related products. With joint efforts, the two companies will provide an economical and efficient solution for antibody discovery by utilising advanced target cells screening technology.

Monoclonal antibodies play a critical role in the life science industry and are essential therapeutics for treating tumours and autoimmune diseases. The traditional process for monoclonal antibody discovery is time-consuming, limiting the efficient development of these antibodies. Hypercell, a high-throughput single-cell sorting system based on bright-field single B cell sorting, leverages advanced microfluidics and artificial intelligence visual recognition technology to conduct screening experiments on tens of thousands of single cells within 2 hours. With its high throughput, user-friendly operation and ability to complete cell sorting within a day, this system is widely applicable in research and commercialization stages in various fields such as antibodies, antibody drug conjugates (ADCs) and cell therapy, while significantly shortening the development cycle of antibodies.

Relying on two core sorting technologies for single-cell and single-bacteria, Bioelectronica is able to offer end-to-end solutions for biological research. As a preferred partner, Duoning has established an extensive global sales network and a mature business platform spanning the entire bioprocess chain. As a key aspect of this collaboration, both parties will support researchers in precise manipulation and efficient screening of single cells, thereby accelerating the speed of antibody development and simplifying the process of biopharmaceutical research and development.