BioSpectrum
the business of Bio & Health Sciences
ASIA EDITION

WuXi Biologics launches targeted integration cell line platform to accelerate biologics development

26 September 2025 | News

TrueSite TI™ leverages targeted integration technique to streamline clone screening and guarantees expression stability

China's WuXi Biologics, a leading global Contract Research, Development, and Manufacturing Organization (CRDMO), has announced the launch of TrueSite TI™, an industry-leading targeted integration (TI)-based CHO cell line platform designed to reshape biologics development by accelerating timelines, enhancing product quality, and ensuring consistent scalability for antibody and complex protein therapies.

Targeted integration is a precision-driven cellular engineering technique that enables the delivery of target expression units to predefined and rigorously validated locations in the host cells. Unlike conventional random integration or transposase methods, it streamlines development by limiting clone screening to just dozens of candidates, ensuring long-term expression stability, and significantly shortening IND timelines.

TrueSite TI™ is the fourth generation of WuXi Biologics' proprietary WuXia™ cell line platform, an established system for generating high-titer, stable cell lines that has been technologically evolved and validated in over 1000 molecules over the past decade. TrueSite TI™ drives greater efficiency and quality with cutting-edge innovations.

It has achieved an average monoclonal antibody (mAb) titer exceeding 8.0 g/L, supporting high-yield commercial manufacturing. It also significantly improves pool and clone quality consistency. Over 99% of the platform's clonal cell lines have maintained stable protein stability after passaging for 60 generations, mitigating the risk of titer drop during scale-up manufacturing to over 20,000 L.

While TrueSite TI™ has proved to be ideal for mAb development, it has also demonstrated strong applicability to complex biologics, including bispecific antibodies (BsAb), Fc-fusion proteins, and Fab fragments, delivering outstanding cell line stability, a reliable and predictable growth profile, and seamlessly consistent pool-to-clone quality. By streamlining process development workflows, TrueSite TI™ provides clients with an industry-leading 6-month IND timeline, enabling fast clinical

trials for breakthrough therapeutics.