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WuXi Biologics introduces new platform to boost recombinant protein and plasmid DNA production

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EffiX is designed to meet the industry's demand for a high-yield, stable, and non-lysogenic E. coli expression system



China-based WuXi Biologics, a leading global Contract Research, Development, and Manufacturing Organization (CRDMO), has announced the launch of its innovative technology platform, EffiX, a proprietary *E. coli* expression system engineered to deliver high yield and exceptional stability in the production of recombinant proteins and plasmid DNA.

The global market for microbial-derived products and intermediates is expanding rapidly, driven by increasing demand for smaller complex biomolecules — such as antibody fragments, nanobodies, enzymes, cytokines, various antigens, polypeptides, and plasmid DNA (pDNA) — all of which present significant opportunities for the development of next-generation therapies.

To address the challenges in producing these biomolecules, WuXi Biologics has introduced the EffiX platform, which enables the development and manufacturing of microbial-derived biologics with high yield, consistent quality, as well as superior stability and scalability. The EffiX platform achieves titers exceeding 15 g/L for non-mAb recombinant proteins and over 1 g/L for plasmid DNA.

With streamlined processes tailored to accommodate a diverse range of project requirements from research through commercial manufacturing, the EffiX platform accelerates the advancement of innovative biotherapeutics for global partners by offering a comprehensive and cost-effective Chemistry, Manufacturing, and Controls (CMC) strategy.

The EffiX platform is an integral component of a broader integrated technology platform at WuXi Biologics, which is predicated on microbial expression systems. This comprehensive platform encompasses early-stage research, CMC development, and GMP manufacturing, facilitating faster, more efficient, and cost-effective manufacturing processes for various modalities in the realm of next-generation therapies.