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Thermo Fisher unveils fully automated plasmid purification system

June 26, 2024 | News

To help accelerate discovery and development of therapies



US-based Thermo Fisher Scientific Inc. has introduced the Thermo Scientific KingFisher PlasmidPro Maxi Processor, the only fully automated maxi-scale plasmid DNA (pDNA) purification system.

PlasmidPro enables innovation at scale, providing complete automation across mini and maxi scale purification and delivering high-purity plasmid without manual column preparation and intervention. This is the latest addition to the Thermo Scientific KingFisher instrument portfolio which offers a wide range of plasmid DNA extraction products to help drive efficiency and consistency.

Globally, there are approximately 1,700 clinical trials for cell and gene therapies. In recent years, plasmids have been instrumental in the development of cell and gene therapies, monoclonal antibody therapies and mRNA therapies and vaccines. Plasmids are commonly used in a variety of molecular biology applications, including transfection, protein expression, gene therapy, DNA sequencing, and vaccine development. They are a critical laboratory tool that can act as a carrier to deliver desired genes or DNA fragments into target cells.

The PlasmidPro purification system requires no set-up, centrifugation or pipetting and completely automates the purification process from culture to plasmid. The product uses a self-contained cartridge pre-filled with all necessary reagents to perform the purification, eliminating the need for additional instrumentation and plastics while minimising set-up time and contamination risks. Using 100-150 mL of fresh overnight culture, the system is capable of producing up to 1.5 mg DNA yield.