

Waters accelerates development of gene-based therapeutics with new GTxResolve Premier SEC columns

23 April 2024 | News

New line of GTxResolve Premier SEC Columns provide higher sensitivity, resolution, and throughput to accelerate the development of cell & gene-based therapeutics



US-based Waters Corporation has introduced new GTxResolve Premier Size Exclusion Chromatography (SEC) 1000Å 3-micron (3 µm) Columns. Waters has implemented a unique combination of novel packing materials and MaxPeak Premier High-Performance Surface (HPS) technology into the columns to help scientists accelerate the development of gene-based therapeutics, including cell & gene, mRNA and LNPs.

"The pipeline of nucleic acid therapeutics continues to grow at a double-digit pace as developers strive to submit new investigational drug filings and complete their first in-human trials. The new Waters GTxResolve Premier SEC Columns supports the growing demand for mRNA, lipid nanoparticle, and viral vector-based therapies with columns that are more robust and provide higher efficiency," said Erin Chambers, Vice President, Consumables and Lab Automation, Waters Corporation. "These SEC columns help to standardise measurements needed to fulfill biological license applications, achieve accelerated approvals, and establish effective release testing strategies."

SEC has emerged as an important platform analytical technique, but existing technologies require extensive column conditioning, consume large amounts of sample, and require lengthy run times to resolve impurities, making them an imperfect solution.

Waters GTxResolve Premier SEC 1000Å 3 µm Columns address those challenges by providing higher sensitivity, resolution, and throughput by combining novel particle technology with low adsorption MaxPeak Premier HPS Technology. They make it possible for scientists to assess drug safety and efficacy more quickly and expedite the development of gene-based therapeutics and vaccines that are both more efficacious and accessible to patients globally.

GTxResolve Premier SEC Columns are engineered to reduce problematic non-specific binding, minimize mobile phase method development challenges, and provide higher throughput separation efficiency.