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ASIA EDITION

MilliporeSigma launches single-use reactor to accelerate antibody drug conjugate manufacturing

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First scalable single-use mixer specifically designed for ADC manufacturing



MilliporeSigma, the US and Canada Life Science business of Merck KGaA, Darmstadt, Germany, has launched the first single-use reactor specifically designed to manufacture antibody drug conjugates (ADCs).

ADCs are a rapidly emerging class of therapeutic agents that can target and selectively kill tumour cells, while protecting healthy ones. The Mobius ADC Reactor is tailored precisely to meet the unique requirements for linking the necessary components. It enables biopharmaceutical companies to produce their critical therapies faster and safer.

Current ADC production methods use stainless steel or glass reactors which require labour-intensive and costly cleaning procedures. Single-use technology costs less, reduces risk, and is more flexible and faster than these traditional methods. However, the adoption of this technology in ADC manufacturing has been limited due to the unique chemical compatibility and quality requirements.

The Mobius ADC Reactor changes this by offering faster turnaround times and fewer cross-contamination risks, all while maintaining high product quality. Performance improvements include elimination of potent liquid waste and a 70% increase in efficiency. Additionally, the new reactor's single-use assemblies are made of Ultimus Film technology, providing enhanced bag strength, improved durability, and leak resistance.