



Your Companion
Life Science Separation



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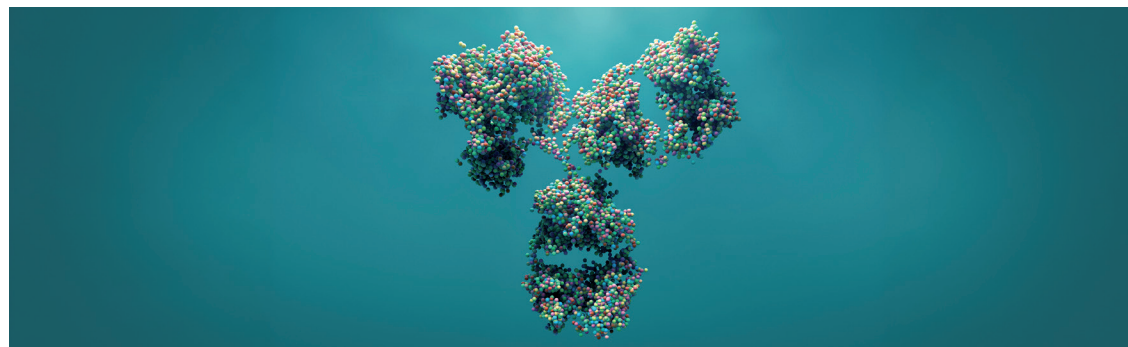
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Digital Membrane Chromatography

Mild antibody purification without
low pH-exposure



DIGITAL MEMBRANE CHROMATOGRAPHY (DMC)

With i3 DMC, the first Digital Membrane Chromatography system, i3 Membrane introduces a new approach to modern chromatographic purification.

By combining Membrane Chromatography with precise control through an electric potential, i3 DMC enables fast, selective, and mild purification of biological targets providing enhanced control over the purification process while preserving sensitive biomolecules.

i3 DMC allows mild antibody purification without traditional acidic elution conditions, thereby helping to preserve molecular integrity. At the same time, the technology reduces manual post-processing steps such as neutralization, or buffer exchanges. This results in less workflow complexity and rapid generation of analysis-reads eluate with high monomer recovery.

PROVEN PERFORMANCE



PRODUCTS AND APPLICATIONS

Two key components, creating a unique product combination. Individually designed for the specific purpose, perfectly matched to work together.

Alongside the functionalized membrane adsorber, i3 DMC_{Control} is the second key component of DMC. The membrane provides chromatographic selectivity, while i3 DMC_{Control} triggers elution by applying a controlled electrical voltage.

Following the established principle of membrane chromatography, the sample is loaded onto the membrane adsorber, where the target molecule binds selectively. Different functionalizations can be used depending on the application, such as Protein A for antibodies and Fc-containing proteins.

