Nuvia™ Chromatography Resins Publications List

Process Separations

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Nuvia™ cPrime™ Hydrophobic Cation Exchange

Wang R-Z et al. (2016).
New tetrapeptide ligands designed for antibody purification with biomimetic chromatography: Molecular simulation and experimental validation.
Biochem Eng J 114, 191–201.

Yan J et al. (2016).
Coadsorption of human immunoglobulin G and bovine serum albumin on a *p*-aminohippuric acid based mixed-mode resin.
J Chem Eng Data 61, 151–159.

Zhu M and Carta G (2016).
Protein adsorption equilibrium and kinetics in multimodal cation exchange resins.
Adsorption 22, 165–179.

Karkov HS et al. (2015).
Evaluation of selectivity in homologous multimodal chromatographic systems using in silico designed antibody fragment libraries.
J Chromatogr A 1426, 102–109.

Lončar N et al. (2015).
Mixed-mode resins: taking shortcut in downstream processing of raw-starch digesting α-amylases.
Sci Rep 5, 15772.

Parimal S et al. (2015).
Interactions of multimodal ligands with proteins: insights into selectivity using molecular dynamics simulations.
Langmuir 31, 7,512–7,523.

Woo J et al. (2015).
Defining the property space for chromatographic ligands from a homologous series of mixed-mode ligands.
J Chromatogr A 1407, 58–68.

Woo J et al. (2015).
The effect of geometrical presentation of multimodal cation-exchange ligands on selective recognition of hydrophobic regions on protein surfaces.
J Chromatogr A 1412, 33–42.

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Nuvia™ cPrime™ Hydrophobic Cation Exchange (continued)

Srinivasan K et al. (2014).
Investigation into the molecular and thermodynamic basis of protein interactions in multimodal chromatography using functionalized nanoparticles.
Langmuir 30, 13,205–13,216.

Yan J et al. (2014).
Protein adsorption behavior and immunoglobulin separation with a mixed-mode resin based on *p*-aminohippuric acid.
J Sep Sci 37, 2,474–2,480.

Gao D et al. (2013).
Evaluating antibody monomer separation from associated aggregates using mixed-mode chromatography.
J Chromatogr A 1294, 70–75.

Glaser V (2013).
Separation of therapeutic biomolecules: mixed-mode chromatography, layered bead designs, in silico modeling used at large scale.
Genetic Eng News 33, 33–34.

Nuvia S Cation Exchange

Guo J and Carta G (2015).
Unfolding and aggregation of monoclonal antibodies on cation exchange columns: effects of resin type, load buffer, and protein stability.
J Chromatogr A 1388, 184–194.

Tao Y et al. (2014).
Evaluation of high-capacity cation exchange chromatography for direct capture of monoclonal antibodies from high-titer cell culture processes.
Biotechnol Bioeng 111, 1,354–1,364.

Ng PK and Snyder MA (2012).
pH-based cation exchange chromatography in the capture and elution of monoclonal antibodies.
J Sep Sci 35, 29–35.

Pérez Almodóvar EX et al. (2012).
Counterion effects on protein adsorption equilibrium and kinetics in polymer-grafted cation exchangers.
J Chromatogr A 1253, 83–93.

Pérez Almodóvar EX et al. (2012).
Multicomponent adsorption of monoclonal antibodies on macroporous and polymer grafted cation exchangers.
J Chromatogr A 1264, 48–56.

Pérez Almodóvar EX et al. (2011).
Protein adsorption and transport in cation exchangers with a rigid backbone matrix with and without polymeric surface extenders.
Biotechnol Prog 27, 1,264–1,272.

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Nuvia S Cation Exchange (continued)

He X et al. (2010).
Nuvia S Media.
Bioprocess Int 8, 59–61.

Nuvia Q Anion Exchange

Zhu M and Carta G (2014).
Adsorption of polyethylene-glycolated bovine serum albumin on macroporous and polymer-grafted anion exchangers.
J Chromatogr A 1326, 29–38.

Ng PK and Snyder MA (2013).
Purification of β-lactoglobulin with a high-capacity anion exchanger: high-throughput process development and scale-up considerations.
J Sci Food Agric 93, 3,231–3,236.

Nian R et al. (2013).
Void exclusion of antibodies by grafted-ligand porous particle anion exchangers.
J Chromatogr A 1282, 127–132.

Vetter TA et al. (2013).
Mixed-beds of strong and weak anion exchange resins for protein separations with step-induced pH gradients.
Sep Sci Technol 49, 477–489.

Ng PK and Snyder MA (2012).
pH-based cation exchange chromatography in the capture and elution of monoclonal antibodies.
J Sep Sci 35, 29–35.

Morrow KJ, Jr (2011).
Strategies to advance mAb production: new approaches to process challenges help push the industry forward.
Genetic Eng News 31, 42–49.

Pérez Almodóvar EX et al. (2011).
Protein adsorption and transport in cation exchangers with a rigid backbone matrix with and without polymeric surface extenders.
Biotechnol Prog 27, 1,264–1,272.

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