



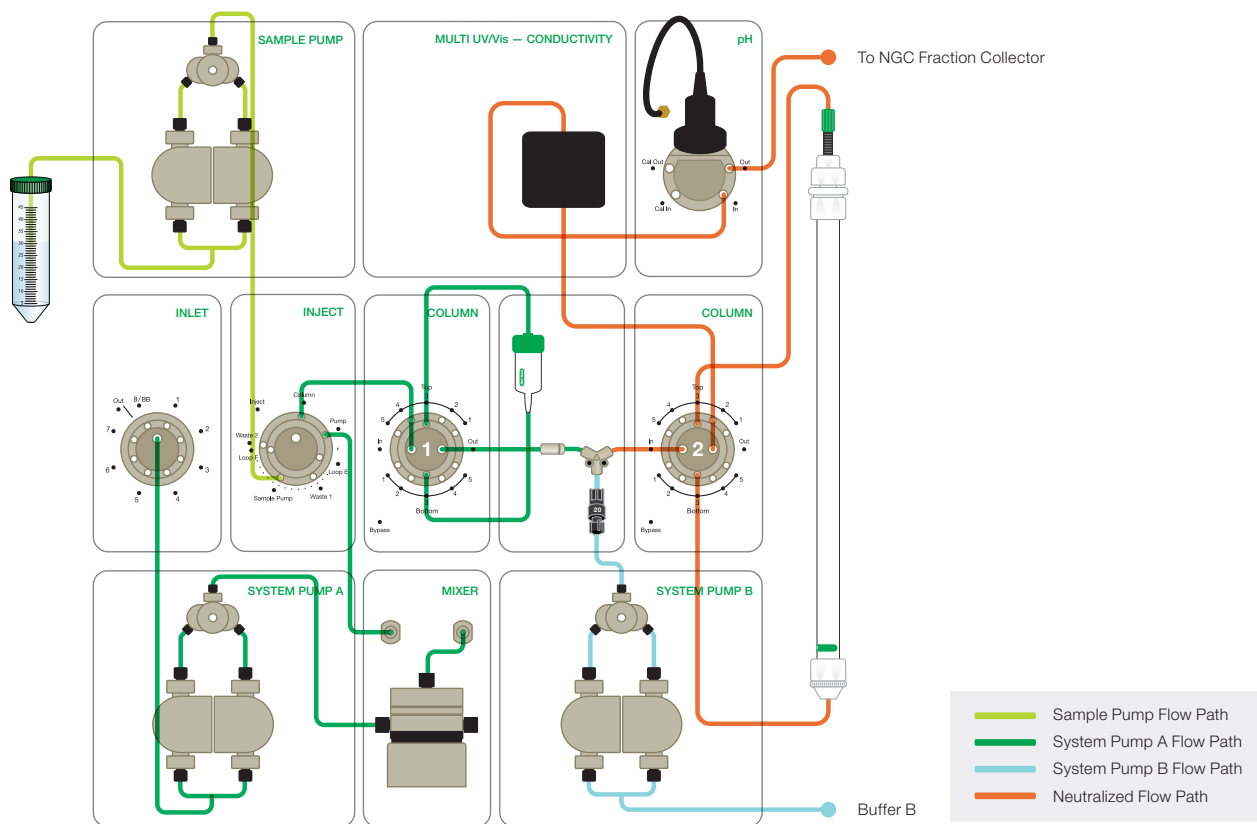
Inline Dilution for Antibody Purification on NGC Chromatography Systems



NGC Chromatography Systems can be configured to meet a range of throughput and application needs for analytical and preparative chromatography.

Antibody purification can be expedited via an inline dilution method on NGC Chromatography Systems. This method combines multiple techniques, including affinity purification, pH neutralization, and size exclusion chromatography (SEC), in a single automated chromatographic run. The configuration described here can be used to obtain up to 50 mg of purified antibody per purification.

In this method, an NGC System Pump (System Pump A) connected to an NGC Inlet Valve drives the majority of the antibody purification process isocratically. Two NGC Column Switching Valves are used; the first is plumbed with an affinity column and the second with an SEC column. Another NGC System Pump (System Pump B) is connected to the flow path after the first NGC Column Switching Valve using a PEEK Y Connector Assembly, bypassing the NGC Mixer. The acidic eluate from the affinity column passes through an inline filter and into the PEEK Y Connector, where it is met with neutralization buffer driven by System Pump B. This neutralized antibody eluate is introduced to the SEC column in phosphate buffered saline to separate antibody monomers from fragments and oligomeric aggregates.



Recommended Materials for Inline Dilution

Item	Ordering Information
NGC Quest 10 Plus Chromatography System, or NGC Quest 100 Plus Chromatography System	Bio-Rad™ Laboratories, Inc., catalog #7880003
NGC 3 rd Tier Expansion Frame	Bio-Rad, #7884000
NGC Column Switching Valve Module, 10 ml	Bio-Rad, #7884012
NGC Inlet Valve Module, for System Pump A	Bio-Rad, #7884006
NGC Sample Pump Module	Bio-Rad, #7884004
NGC pH Valve Module	Bio-Rad, #7884011
Tefzel Plug, for unused NGC Column Switching Valve Module ports	Bio-Rad, #7500563
Inline Filter Kit	Bio-Rad, #7500703
PEEK Y Connector Assembly, 1/4–28, 0.06" inner diameter	IDEX Corporation, #P-514
EconoFit UNOsphere SUPra Column, 1 x 5 ml	Bio-Rad, #12009323

Visit bio-rad.com/NGC for more information.

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