

dynamic PF-CC-1 proFIRE Purification Column Instruction Manual

Home » Dynamic » dynamic PF-CC-1 proFIRE Purification Column Instruction Manual

dynamic PF-CC-1 proFIRE Purification Column



Contents

- **1 Product Description**
- 2 Handling
- **3 Useful Order Numbers**
- **4 Contact**
- 5 Documents /

Resources

- **5.1 References**
- 6 Related Posts

Product Description

Order Number: PF-CC-1

Table 1. Contents and Storage Information

Column Specifications		Media Specifications		
Column Volume	1 mL	Matrix	Hydrophilic porous polymer beads	
Column material	Polypropylene	Particle size	30 μm	
Column size length x I.D.	26 x 7.0 mm	Functional group	-R-N+(CH3)3	
Recommended flow rate	1 mL/min	pH range	2 – 12	
Maximum flow rate	4 mL/min	Temp. range	4 – 60 °C	
Max. pressure	0.3 MPa	Shipping solvent	20 % EtOH aqueous solution	

Handling

Storage and Lifetime

Store in 20 % ethanol at 4 – 35 °C.

For longer lifetime, flush weekly the column with water, then with 20 % EtOH solution. Make sure to close the end tightly to avoid drying out.

Equilibration and Elution

Protein-DNA conjugates are electrostatically bound to the matrix of the column with proFIRE® Buffer A as a first mobile phase, then eluted with a salt-concentration gradient method (proFIRE® Buffer B). Water-soluble organic solvent (maximum of 30 %) can be added in the mobile phase. Before adding such solvent, make sure that the salt will not precipitate.

Cleaning / Troubleshooting

If the column is showing a change in retention time of the free DNA peak or alterations in peak shape and/or pressure increase, follow the washing steps described below.

- 1. Place buffer tubing A and B in a bottle with water (filtered) and start a "Clean & Sleep" run via Mobile Control software. Leave the column in.
- 2. Place the buffer tubing B in a bottle with 0.1 M to 0.5 M NaOH (filtered) and leave the buffer tubing A in water (filtered).
- 3. Reverse the column and connect the column outlet to the inlet-tubing coming from the pump. Do not connect the other outlet of the column to the tubing going to the flow cell.
- 4. Place the opened outlet of the column in a clean bottle to collect the washing solution.

NOTE: It should be avoided contaminating the system with the washing solution.

- 5. Tap the "System Overview" symbol, then tap on "Sample injection" in Mobile control software.
 - a. Check if the fraction valve port is set to position 13 (waste position)
 - b. Check if the injection valve port is set to position 1 (bypass position)
 - c. Select the pump on the left bottom side
 - d. Set the pump parameters for channel B: Select channel B (100%), adjust the flow to 1 mL/min, tap "Apply" and "Run".
- 6. Collect the fluid eluting from the column and leave the flow for 10 15 minutes.

- 7. Set the pump parameters for channel A: Select channel A (100%), adjust the flow to 1 mL/min, tap "Apply" and "Run".
- 8. Collect the fluid eluting from the column and leave the flow for 15 minutes.
- 9. Stop the flow and reverse the column in its original intended position with both PEEK-tubings connected to the system.
- 10. Put both buffer tubing A and B in a bottle with water (filtered) and start two "Clean & Sleep" runs, one after each other via Mobile Control software.
- 11. Place the tubing A in (filtered and degassed) proFIRE® Buffer A [1] and the tubing B in (filtered and degassed) proFIRE® Buffer B [2] and start a buffer run.
 - Type in the DNA length 1, inject 160 µL of proFIRE® Buffer A and press "Start".
- 12. Start a DNA only run with a known DNA oligo you can refer to.

Useful Order Numbers

Table 2. Order Numbers

Product Name	Amount	Order No
10x Buffer A [1]	50 mL (yielding 500 mL)	PF-BU-A-10
5x Buffer B [2]	50 mL (yielding 250 mL)	PF-BU-B-5
proFIRE® Amine Coupling Kit 1 for proteins (>5 kDa);	5 conjugations	PF-NH2-1
proFIRE® Thiol Coupling Kit 1 for proteins (>5 kDa);	5 conjugations	PF-SH-1

Contact

Dynamic Biosensors GmbH Perchtinger Str. 8/10 81379 Munich Germany

Dynamic Biosensors, Inc. 300 Trade Center, Suite 1400 Woburn, MA 01801 USA

Order Information order@dynamic-biosensors.com
Technical Support support@dynamic-biosensors.com
www.dynamic-biosensors.com

Instruments and chips are engineered and manufactured in Germany. ©2024 Dynamic Biosensors GmbH | Dynamic Biosensors, Inc. All rights reserved.





dynamic PF-CC-1 proFIRE Purification Column [pdf] Instruction Manual PF-CC-1 proFIRE Purification Column, PF-CC-1, proFIRE Purification Column, Purification Column, Column

References

- **Biosensors** International Ltd
- Dynamic Biosensors
- Dynamic Biosensors
- User Manual

Manuals+, Privacy Policy

This website is an independent publication and is neither affiliated with nor endorsed by any of the trademark owners. The "Bluetooth®" word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. The "Wi-Fi®" word mark and logos are registered trademarks owned by the Wi-Fi Alliance. Any use of these marks on this website does not imply any affiliation with or endorsement.