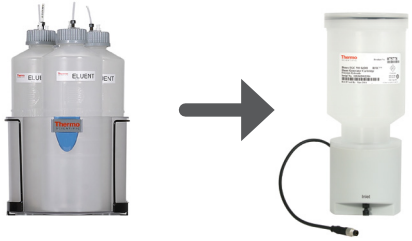
Guide to switching between manually and electrolytically prepared eluent for IC

Reagent-Free™ Ion Chromatography Eluent (RFIC)™ Generation to manually prepared eluent

1. Remove column set and install a union in its place
2. Bypass EGC, CR-TC, and EG degasser by connecting pump out directly to the injection valve
3. Disconnect DI water bottle and replace with bottle of manually prepared eluent
4. Optional: adding the gradient mixer (GM-3) in-line may dampen pump pulsations, thereby improving baseline noise
5. Prime the pump at 6 mL/min for five minutes
6. Reinstall the column set, directing the outlet of the separator column to waste, and run at application flow rate for 10 minutes
7. Stop flow, connect conditioned suppressor and run pump at application flow rate for 10 minutes
8. Stop pump, allow suppressor to stand for 20 minutes
9. Turn pump on at normal application flow rates
10. Turn on suppressor (electrolytic) and set appropriate column temperature



Manually prepared eluent to RFIC KOH

1. Remove column set and install a union in its place
2. Replace prepared eluent bottle with DI water bottle
3. Prime the pump at 6 mL/min for five minutes
4. Turn pump flow on at the application flow rate
5. After 10 minutes, stop flow
6. Remove and plug the suppressor ports
7. Connect the KOH EGC and run the pump for a further 10 minutes to flush out any old eluent
8. Connect anion column set, directing outlet of separator column to waste and run 10 mM KOH at the application flow rate for 10 minutes
9. Stop flow and connect anion suppressor
10. Run pump at application flow rate, 10 mM KOH for 10 minutes
11. Stop pump, allow suppressor to stand for 20 minutes
12. Turn pump, suppressor, EGC, and CR-TC on using normal application flow rates and set the column to the appropriate temperature for the application

Anion to cation RFIC

1. Remove anion column set and install a union in its place
2. Remove anion suppressor, EG cartridge and CR-TC. Plug all ports
3. Install cation (MSA) EGC and flush to waste by running the pump for 10 minutes. Install CR-TC, flush to waste
4. Run 10 mM MSA at application flow rate for 10 minutes
5. Connect cation column and run 10 mM MSA to waste for 10 minutes
6. Stop flow and connect cation suppressor
7. Run pump at application flow rate for 10 minutes
8. Stop pump and allow suppressor to stand for 20 minutes
9. Turn pump on at normal application flow rates, turn on the suppressor (electrolytic), and set the appropriate column temperature

For more information visit **thermofisher.com/ic**