Dionex Eluent Generator Cartridge
Potassium Hydroxide
Product No. 074532

Date: 06-Dec-22 07:21
Serial No. : 221250147019

Quality Assurance Report

To assure quality, Thermo Scientific tests each EluGen Cartridge using a prescribed set of quality assurance tests for backpressure and current delivery over the product concentration range. This Quality Assurance Report covers the tests that are done with this product.

Performance Test Results

Parameter	Specification	Result
Maximum Concentration	Pass/Fail	Passed
Maximum Operating Voltage	Pass/Fail	Passed
Maximum Cartridge Back Pressure	Pass/Fail	Passed

RFIC Eluent Generation Theory

The eluent concentration generated by an RFIC Eluent Generation System is dependent on two main factors:

- the eluent flow rate delivered to the EG Cartridge from the pumping system
- the applied current delivered to the EG Cartridge from the Eluent Generator module.

Dionex's patented Eluent Generation technology follows Faraday's Law and the eluent concentration is therefore directly proportional to the applied current and inversely proportional to the eluent flow rate.

$$[\text{Eluent (mM)}] \quad \frac{\text{Applied Current (mA)}}{\text{Eluent Flow Rate (mL/min)}}$$

This physical law ensures the accuracy of each EluGen Cartridge provided the applied current and eluent flow rate are accurately calibrated. It is critical that the pump flow rate is calibrated and the Eluent Generator module is verified to supply the correct current. Dionex offers a series of Operational Qualification and Performance Qualification (OQ/PQ) procedures for pump and eluent generator module calibration. These are available for Dionex Chromeleon and PeakNet 6, version 6.30 or later.

Production Reference:

Datasource: EGC7
Directory: EGC_3
Sequence: 2011914 - EGC-III-KOH
Sample No.: 11