

AccQ-Tag Ultra C₁₈ Column

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I. INTRODUCTION

The AccQ-Tag™ Ultra C₁₈, 2.1 x 100 mm Column (p/n: [186003837](#)), is an integral component of Waters UPLC® Amino Acid Analysis Solution. The solution consists of an integrated combination of instrumentation, derivatization chemistry, column, eluents, methods, software, and support. Consequently and when used as documented, analysts are assured of accurate and precise amino acid analyses with this detailed complete application solution. The use of the AccQ-Tag Ultra Column without the rest of the application solution is not supported as an amino acid analysis method because there are significant risks of inaccurate qualitative and quantitative analysis.

The AccQ-Tag Ultra Column significantly differs from the AccQ-Tag 3.9 x 150 mm Column (p/n: [WAT052885](#)) in both chemistry composition and column configuration. In addition, the quality control tests for the AccQ-Tag Ultra Column vs. AccQ-Tag Column are different, further supporting the fact that these two column chemistries cannot be used interchangeably.

Note: Please refer to Waters "UPLC Amino Acid Analysis solution" (p/n: [720001837EN](#)), "UPLC Amino Acid Analysis Solution System Guide" (p/n: 71500129702), and "ACQUITY UPLC® H-Class and H-Class Bio Amino Acid Analysis System Guide" (USRM134761474) for additional information related to use of the AccQ-Tag Ultra C₁₈ Column for this defined application solution.



II. GETTING STARTED AND COLUMN USE

Please refer to the Waters UPLC Amino Acid Analysis Solution System Guide (p/n: 71500129702) for detailed information. This can be found by searching the literature code on www.waters.com.

III. COLUMN CLEANING AND STORAGE

a. Cleaning

When required, the AccQ•Tag Ultra C₁₈ column can be safely cleaned with 100% acetonitrile at 0.5 mL/min for 30 minutes.

b. Storage

Short Term (i.e., <2 days):

20/80 (acetonitrile/water)

Long Term (i.e., >2 days):

Flush column with water for 20 minutes at 0.2mL/min.

Then follow with 100% acetonitrile for 15 minutes at 0.2mL/min and store.

Note: Do not allow the column to dry out or freeze.

IV. eCORD INTELLIGENT CHIP TECHNOLOGY

a. Introduction

The eCord™ Intelligent Chip provides the history of a column's performance throughout its lifetime. The eCord is permanently attached to the column to assure that the column's performance history is maintained in the event that the column is moved from one instrument to another.

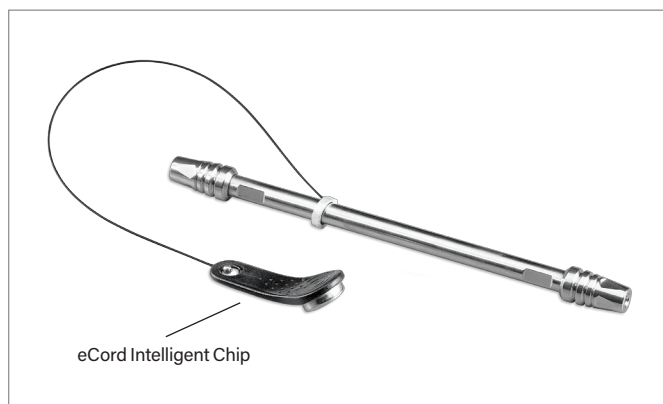


Figure 1: Waters eCord Intelligent Chip.

At the time of manufacture, tracking and quality control information will be downloaded to the eCord. This includes the conditions and results for the Performance Test Chromatogram. Storing this information on the chip will eliminate the need for a paper Certificate of Analysis. Once the user installs the column, the software will automatically download key parameters into a column history file stored on the chip. In this manual, we explain how the eCord will provide a solution for easily tracking the history of the columns, reduce the frustration of paperwork trails, and give customers the reassurance that a well performing column is installed onto their instruments.

b. Installation

Install the column into the column heater. Plug the eCord into the side of the column heater. Once the eCord is inserted into the column heater, the identification and overall column usage information will be available in the ACQUITY Console, allowing the user to access column information on their desktop.

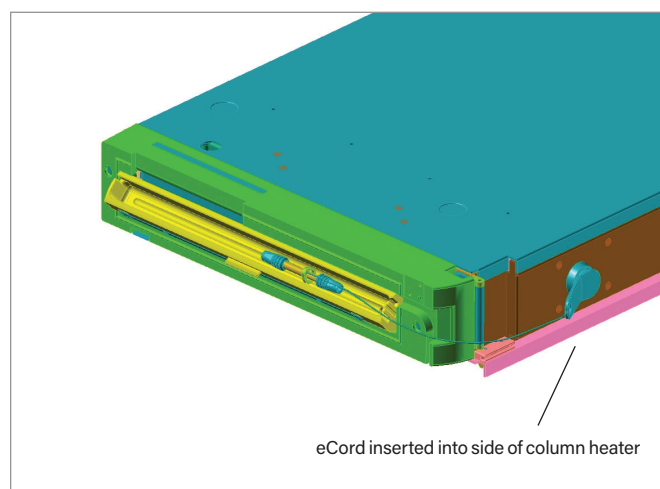
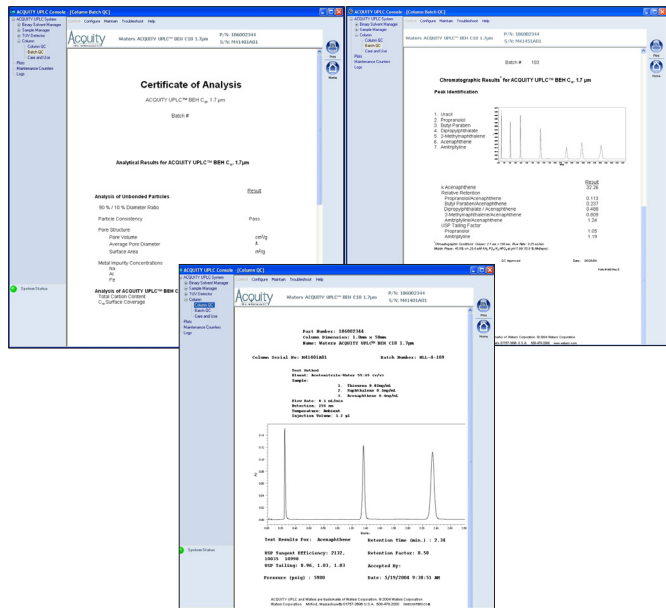


Figure 2: Determination of gradient delay volume.

c. Manufacturing Information

The eCord Chip provides the user with an overview of the bulk material QC test results. The eCord Chip provides the user with QC test conditions and results on the column run by the manufacturer. The information includes mobile phases, running conditions and analytes used to test the columns. In addition, the QC results and acceptance is placed onto the column.

ACCQ-TAG ULTRA C₁₈ COLUMN CERTIFICATE OF ANALYSIS DOCUMENTATION

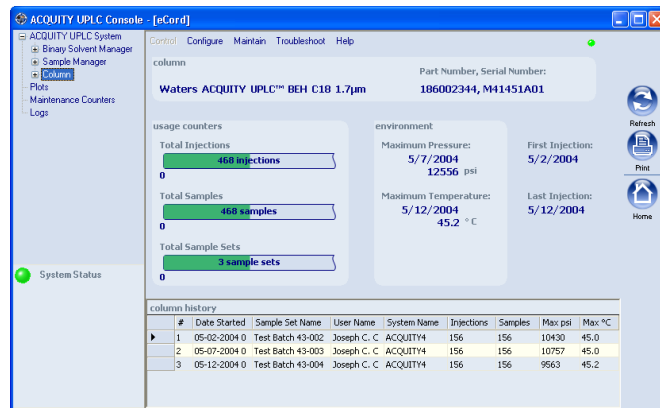


d. Column Use Information

The eCord Chip provides the customer with column use data. The top of the screen identifies the column including chemistry type, column dimensions and serial number. The overall column usage information includes the total number of samples, total number of injections, total sample sets, date

of first injection, date of last injection, maximum pressure, and temperature. The information also details the column history by sample set including date started, sample set name, user name, system name, number of injections in the sample set, number of samples in the sample set, maximum pressure, and temperature in the sample set and if the column met basic system suitability requirements.

COLUMN INFORMATION EASY ACCESSIBLE VIA WATERS eCORD TECHNOLOGY



V. CAUTIONARY NOTE

Some products may be hazardous during and after use and are to be used by professional laboratory personnel trained in the competent handling of such materials. The responsibility for the safe use of products rests entirely with the purchaser and user. The safety data sheets (SDS) for these products are available at www.waters.com/sds.

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