Requesting Technical Support

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Contact us: technical@mac-mod.com Phone: 800-441-7508

How to Find an Existing Application or Starting Point for a New Method

You can search for existing applications on our website on the <u>applications library</u> page. From the applications page, you can search for applications by:

- Brand
- Phase
- Instrument type
- LC mode
- Industry
- Compound class
- Analyte(s)

With each filtered choice, the available applications are displayed below the search fields on the applications library page.

How to Request a New Application to Be Developed

If you would like to discuss a new application for a class of compounds or one or more analytes, please email technical@mac-mod.com and describe in detail which application you would like to see developed. We can provide your suggestion to our column manufacturers, but they may or may not be able to develop a new application. We can work with you to make recommendations for method development in an interactive, iterative approach, and have done so with a variety of customers.

When you send an email to us regarding a method development project, please include the following information:

- Analytes(s):
- Compound class:
- Sample matrix:
- Instrumentation: brand and model(s)
- Separation mode: isocratic or gradient
- Desired detector: LC-UV, LC-ELSD, LC-CAD, LC-MS
- Desired turnaround time (analysis time and equilibration time) in minutes:
- Columns and conditions tried thus far:
- Other method criteria: critical pair separations, mobile phase preferences, etc.

This information will be used as a basis for us to provide you with an action plan. We recommend that we schedule a virtual meeting via Microsoft Teams as the best next step to discuss your method.

Product Selection

Column Recommendations for New and Existing Methods

We can provide recommendations for an alternative/ "equivalent" column for an existing method, or we can recommend one or more columns that are likely to be very different in selectivity (orthogonal) from or very similar to your current column.



Which Column Geometry and Particle Size Would Be Best for Your Instrument and Method?

Depending on the complexity of your sample, your available instrumentation (extra-column dispersion, flow cell volume, detector data rate, detector type, pressure limit, etc.) and the desired analysis time, a variety of factors should be considered when choosing the appropriate column size and particle size for your new or existing method.

We can estimate the maximum or starting worst case pressure for your prospective method conditions, and we can recommend what is necessary to obtain the most efficiency from a given column and your instrument configuration. These estimates and recommendations will put you on the best path forward for success with your method.

Validating a Method

When you are planning to carry out method validation for a newly developed method, it is a prudent practice to purchase columns from at least two or three packing material lots (batches) to assess whether your method is rugged with respect to any subtle lot-to-lot differences.

What Is My Column's Serial Number and Lot Number?

The serial number and lot number of each column are shown on the test chromatogram provided in the column box. The column serial number is also provided on a tag on the column itself. If you do not have the test chromatogram, we can contact the column manufacturer to identify the lot number. If you need to identify the lot numbers or serial numbers for columns that have been used previously, we may be able to look up the serial numbers in our database using your company name, sales order(s), and column part numbers. From the serial numbers, the manufacturers can identify the lot numbers of those columns, which can make it easier to select column lots for method validation.

If you have already used one or more packing material lots, you can specify that the column(s) that you want to purchase for method validation be packed with lots different from one(s) you have already used. For example, when you order your new columns for method validation, you can specify that the columns be packed from lots different from "Lot Number XXXXX" (using the lot or batch designation for columns you've used previously for method development).

When making a request for columns from different lots for method validation purposes, please email the customer service team at info@mac-mod.com to request a quote. This quote will specify your specific lot request or avoidance, and then once you place your order, please reference this quote number. These steps will ensure that the columns you need are prepared and delivered to match your request.

Post-Sales Support and Troubleshooting

It is a rare event when a customer calls or emails us to report a problem with one of the products that MAC-MOD Analytical sells. MAC-MOD and our suppliers stand behind the products we sell and that they manufacture, and we will do our best to work with our customers to identify and solve any problems that may arise. To assist you best, it is important that you provide us with as much information as you can regarding what you have observed, how the recent product performance differs from what you've observed previously, and how you discovered any issue with performance.

To assist you and to carry out troubleshooting in a productive way, it is important that you provide as much information about the issue as possible. Send an email message to technical@mac-mod.com and provide the following information:

- In the email subject line, please put your company name, your name, and the part number in question.
- In the email body, please provide a general description of the current problem with the product, and how the performance of the problematic product compares with the same product from previous purchases, if that is relevant.
- If appropriate and relevant, please attach a picture or pictures of the product that documents any performance issue.
- For any HPLC or UHPLC column problems, please download the Microsoft Excel Method Information Template by clicking this link and saving it to your computer.
- Fill out the template as completely as possible and save it to your computer. Attach the completed Microsoft Excel file to the email message that you send.
- In addition, please send any pertinent chromatograms, labeled appropriately. Copy and paste the chromatograms into a Microsoft Word or PowerPoint document, and then attach the document to your email message. If you scan annotated chromatograms to PDFs, they can also be attached and sent via email.
- Once we receive your information, we will review it and will contact you for more information, if necessary.
 If required, we will then call you or set up a web meeting to discuss the problem in more detail and to discuss an action plan to resolve the problem.

