LC/MS/MS Method Package for Veterinary Drugs
For LabSolutions Version 5.41 SP1

Question:
Can Shimadzu provide pre-optimized MRM or HPLC conditions?

Solution:
Yes, by using a method package.

Ready-to-Use Methods Provided

Shimadzu provides method files, including pre-registered MRM parameters with optimized quantitative and reference ions, LC separation parameters, and retention times and peak identification parameters for each compound, as well as report templates for outputting quantitation results, as a package. If retention times are adjusted when the system is introduced, based on the HPLC configuration delivered, the analysis process can be started as soon as the specified columns, mobile phases, and standard samples are supplied.

Methods Easily Customized

Since LabSolutions Version 5.41 SP1 enables the addition or deletion of components to be analyzed, methods can be easily customized. In addition, the package includes a compound parameter list created in Excel format, which enables the creation of new tables that list only the components needed.

HPLC Conditions
Analytical column: Shim-pack HR-ODS (150 mm L x 3.0 mm I.D., 3µm)
P/N 228-59908-95
Mobile phase A: 0.1 % Formic acid - water
Mobile phase B: Acetonitrile
Flow rate: 0.4 mL/min
Injection volume: 10 µL

Gradient Program

<table>
<thead>
<tr>
<th>Step</th>
<th>Time (min)</th>
<th>A (%)</th>
<th>B (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>99</td>
<td>1</td>
</tr>
<tr>
<td>1</td>
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<td>100</td>
</tr>
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<td>3</td>
<td>40.1</td>
<td>99</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>50</td>
<td>99</td>
<td>1</td>
</tr>
</tbody>
</table>
The LabSolutions quantitation browser provides an ideal environment for confirming the separation and shape of chromatogram peaks for multiple components at the same time, such as for the simultaneous multi-component analytical methods included in the method package. Since chromatogram and calibration curve displays are linked to component names, clicking on a component name automatically changes the displayed information, which allows correcting peak integration parameters and calibration curves directly.

S/N ratios, quantitative limits, detection limits, and other information are calculated automatically for peaks identified in each chromatogram, significantly reducing the workload. It also displays a summary of statistical calculation results, such as mean and %RSD values for multiple data values. Accuracy decision results based on specified criteria are also displayed in the window, which allows instantaneously confirming any abnormal data.

LabSolutions enables registering analytical data directly into CLASS-Agent, a network compatible data management tool. CLASS-Agent Manager enables easily refining data based on various search parameters, such as analyst name or analysis date/time. It can also manage PDF files and includes an electronic signature function. These features help support a paperless laboratory.

(CLASS-Agent and CLASS-Agent Manager are options.)

Remarks and Precautions
1. Shimadzu makes no warranty regarding the accuracy of information included in the database or the usefulness of information obtained from using the database.
2. Be sure to perform tests using standard samples to confirm qualitative and quantitative information obtained with the given system.
3. To reliably identify registered substances using this database, measure samples using the instrument parameters specified in the method template files included in the product.

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