LC/MS/MS Analysis of Steroid Hormones in Plasma on Ascentis® Express C18 after Sample Prep using HybridSPE®-Phospholipid

This application shows the separation of steroid hormones in plasma using LC/MS/MS. HybridSPE-Phospholipid removed endogenous phospholipids and precipitated proteins, thereby allowing rapid, sensitive analysis by LC/MS/MS using an Ascentis Express C18 column. Fluka LC-MS Ultra CHROMASOLV solvents were used to supply low background interference and low particulate contaminants for robust, trouble-free operation. Cerilliant CRMs provided reliable identification and quantification.

Related Products

analytical column
Ascentis® Express C18, 2.7 Micron HPLC Column (Supelco 53823-U)
mobile phase component
Ammonium formate (Fluka 14266)
Formic acid (Fluka 14265)
Methanol (Fluka 14262)
Water (Fluka 14263)
SPE tube or plate
HybridSPE®-Phospholipid (Supelco 575656-U)
standard
Aldosterone solution (Cerilliant A-096)
Corticosterone solution (Cerilliant C-117)
17α-Methyltestosterone solution (Cerilliant M-906)
Progesterone solution (Cerilliant P-069)
Testosterone solution (Cerilliant T-037)

MRM Transition

<table>
<thead>
<tr>
<th>Compound</th>
<th>MRM Transition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Aldosterone</td>
<td>361.0/343.1</td>
</tr>
<tr>
<td>2. Corticosterone</td>
<td>347.6/109.0</td>
</tr>
<tr>
<td>3. 11-Deoxycorticosterone</td>
<td>331.1/109.0</td>
</tr>
<tr>
<td>4. Testosterone</td>
<td>289.0/109.0</td>
</tr>
<tr>
<td>5. 17α-Methyltestosterone</td>
<td>303.1/97.0</td>
</tr>
<tr>
<td>6. Progesterone</td>
<td>315.0/109.1</td>
</tr>
</tbody>
</table>