

# CoreFocus Report

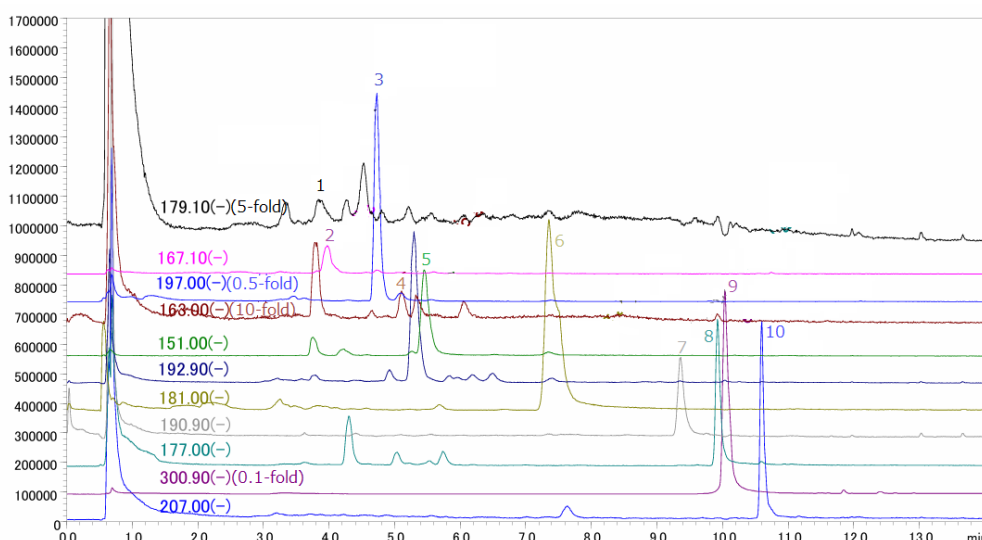
No.579

LC-MS   Reversed-phase   Shim-pack™ Series

## Shim-pack Velox™ Biphenyl

## Analysis of Aromatic Carboxylic Acid-Related Compounds in Whiskey

Keywords: Flavor component, Beverage



1. Caffeic acid
2. Vanillic acid
3. Syringic acid
4. p-Coumaric acid
5. Vanillin
6. Syring aldehyde
7. Scopoletin
8. Coniferyl aldehyde
9. Ellagic acid
10. Sinapaldehyde

### [HPLC conditions] (Nexera X3)

Column : Shim-pack Velox Biphenyl,  
100 mm x 2.1 mm I.D., 2.7 μm\*1  
Column temp. : 40 °C  
Injection volume : 10 μL  
Mobile phases : A) 0.1 % formic acid in Water  
B) 0.1 % formic acid in MeOH  
Flow rate : 0.4 mL/min  
Time program (%B) : 5 % (0-2 min) → 25 % (2.01-7.5 min)  
→ 100% (15-16 min) → 5 % (16.01-20 min)

1\*: P/N : 227-32015-03

### [MS conditions] (LCMS-2050)

Ionization : ESI/APCI (DUIS™) (Negative mode)  
Nebulizing gas flow : 2.0 L/min  
Drying gas flow : 5.0 L/min  
Heating gas flow : 7.0 L/min  
DL temp. : 250 °C  
Desolvation temp. : 500 °C  
SIM mode : Vanillin : 151.00  
Coumaric acid : 163.00  
Vanillic acid : 167.10  
Coniferyl aldehyde : 177.00  
Caffeic acid : 179.10  
Syring aldehyde : 181.00  
Scopoletin : 190.90  
Trans-Ferulic acid : 192.90  
Syringic acid : 197.00  
Sinapaldehyde : 207.00  
Ellagic acid : 300.90

Source : Application News 01-00641 (JP)

CoreFocus, Shim-pack, Shim-pack Velox, Nexera and DUIS are trademarks of Shimadzu Corporation or its affiliated companies in Japan and/or other countries.

**Shimadzu Corporation**

[www.shimadzu.com/an/](http://www.shimadzu.com/an/)

**For Research Use Only. Not for use in diagnostic procedures.**

This publication may contain references to products that are not available in your country. Please contact us to check the availability of these products in your country.

The content of this publication shall not be reproduced, altered or sold for any commercial purpose without the written approval of Shimadzu.

Company names, products/service names and logos used in this publication are trademarks and trade names of Shimadzu Corporation, its subsidiaries or its affiliates, whether or not they are used with trademark symbol "TM" or "®".

Third-party trademarks and trade names may be used in this publication to refer to either the entities or their products/services, whether or not they are used with trademark symbol "TM" or "®".

Shimadzu disclaims any proprietary interest in trademarks and trade names other than its own.

The information contained herein is provided to you "as is" without warranty of any kind including without limitation warranties as to its accuracy or completeness. Shimadzu does not assume any responsibility or liability for any damage, whether direct or indirect, relating to the use of this publication. This publication is based upon the information available to Shimadzu on or before the date of publication, and subject to change without notice.