

CoreFocus Report

No.583

LC-MS

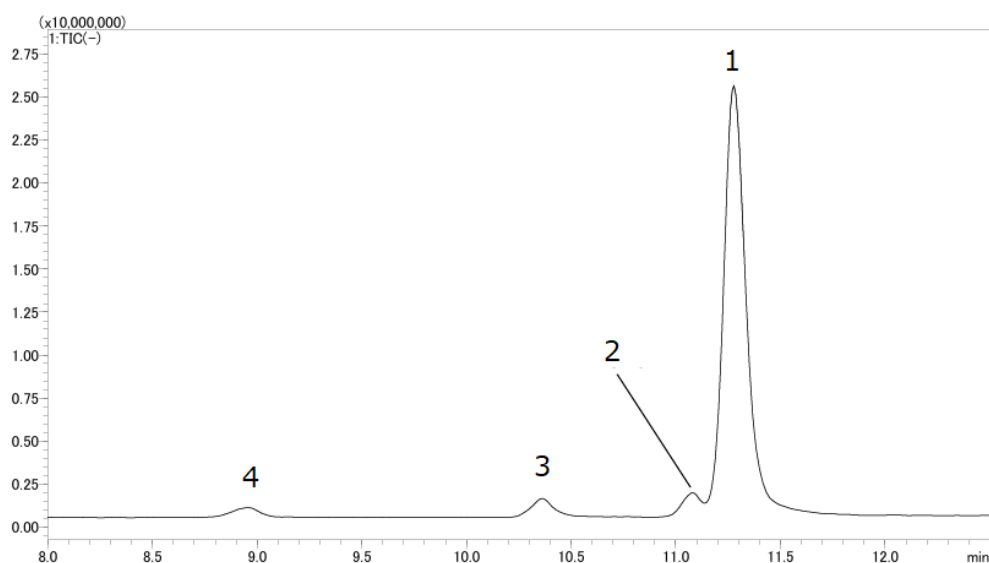
Reversed-phase

Shim-pack™ Series

Shim-pack Scepter™ Claris C18-300

Analysis of Impurities in Oligonucleotide Therapeutics

Keywords: Quality control, Purity confirmation, Bio inert coating column



1. FLP
2. n-1 (3')
3. n-3 (3')
4. n-10 (5')

[HPLC conditions] (Nexera™ XS inert)

Column : Shim-pack Scepter Claris C18-300,
100 mm x 2.1 mm I.D., 1.9 μm⁺
Flow rate : 0.3 mL/min
Mobile phases : A) 100 mmol/L HFIP and 10 mmol/L TEA
in water
B) Methanol
Time program : 10 % B (0 min) → 35 % B (15 min) →
40 % B (20min) → 90 % B (20.1 -22
min) →
10 % B (22.1 – 26 min)
Column temp. : 60 °C
Injection volume : 6 μL
Detection : PDA at 190 nm - 400 nm

1*: P/N : 227-31209-02

[MS conditions] (LCMS-2050)

Ionization : ESI/APCI (DUIS™), negative mode
Mode : Scan (*m/z* 550 -2000)
Nebulizing gas flow : 3.0 L/min (N₂)
Drying gas flow : 5.0 L/min (N₂)
Heating gas flow : 7.0 L/min (N₂)
DL temperature : 200 °C
Desolvation temperature : 400 °C
Interface voltage : -3.0 kV

Source : Application News 01-00656 ([JP](#), [ENG](#))

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

Shimadzu Corporation

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.