

High Sapsitike Analysis of Systhetics Olige DNAs by Hig/MS: (Comparisor, between VNr20, 10, and Com

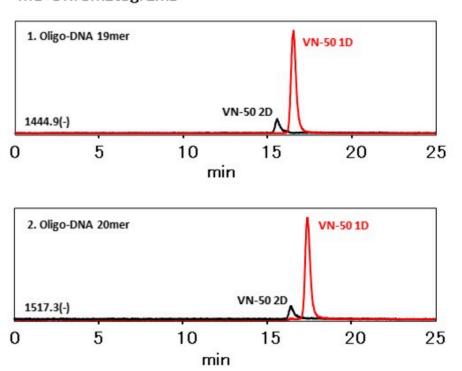
Synthetic oligo-DNAs of 19 and 20mer were analyzed using HILICpak VN-50 1D and VN-50 2D. The VN-50 1D with an inner diameter of 1.0 mm improves the sensitivity of LC/MS by lowering the flow rate. A simple analytical condition used in this application does not require ion-pair reagents nor highly concentrated salts for the separation and analysis of oligo-DNAs.

Sample: 0.4 µL

0.05 mg/mL each (in $\rm H_2O/CH_3CN{=}50/50)$

- Synthesized oligo-DNA 19mer(crude) TTCTCATGGTTCTTCGGAA
- Synthesized oligo-DNA
 20mer(crude)
 CTTCTCATGGTTCTTCGGAA

MS Chromatograms



Column	: Shodex HILICpak VN-50 1D (1.0 mm I.D. x 150 mm) Shodex HILICpak VN-50 2D (2.0 mm I.D. x 150 mm)
Eluent	: (A);50 mM HCOONH ₄ aq. /(B); CH ₃ CN Linear gradient ; (B %) 65 to 50 % (0 to 20 min), 50 to 65 % (20 to 20.01 min), 65 % (20.01 to 25 min)
Flow rate	: 0.1 mL/min (VN-50 1D) 0.3 mL/min (VN-50 2D)
Petector	: ESI-MS (SIM Negative)
olumn temp.	: 40 °C