

Minimising carryover in oligonucleotide analysis by AEX

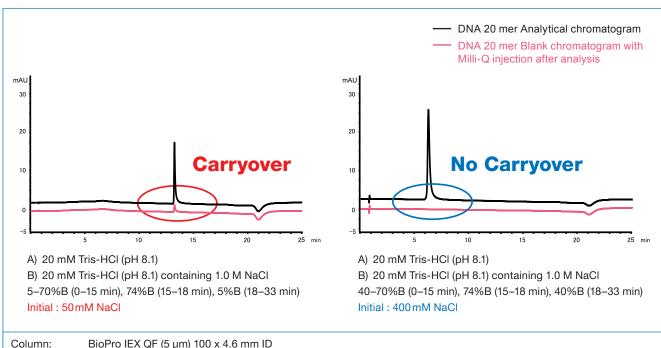
commonly occurring issue in oligonucleotide analysis by anion exchange chromatography (AEX) is sample carryover. Let's take a close look on a single-stranded DNA 20 mer sample. When the initial gradient concentration of NaCl is low (e.g. 50 mM), carryover is observed. By increasing the initial gradient concentration of NaCl up to 400 mM

carryover can be avoided with corresponding improvement in reproducibility. However, it is essential to remember that high salt concentrations might decrease the solubility of the analyte. In order to prevent precipitation during the analysis, it is recommended to routinely check the analyte's solubility for previous higher salt concentrations.

Sample

Single-stranded DNA

5'-TCATCACACTGAATACCAAT-3' (DNA 20 mer)



Part No.: QF00S05-1046WP 1.0 ml /min Flow rate:

Temperature: 25°C Detection: UV at 260 nm Injection: 2 mL (10 nmol/mL)