

Minimising carryover in oligonucleotide analysis by AEX

A 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 20mer 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 20mer)
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