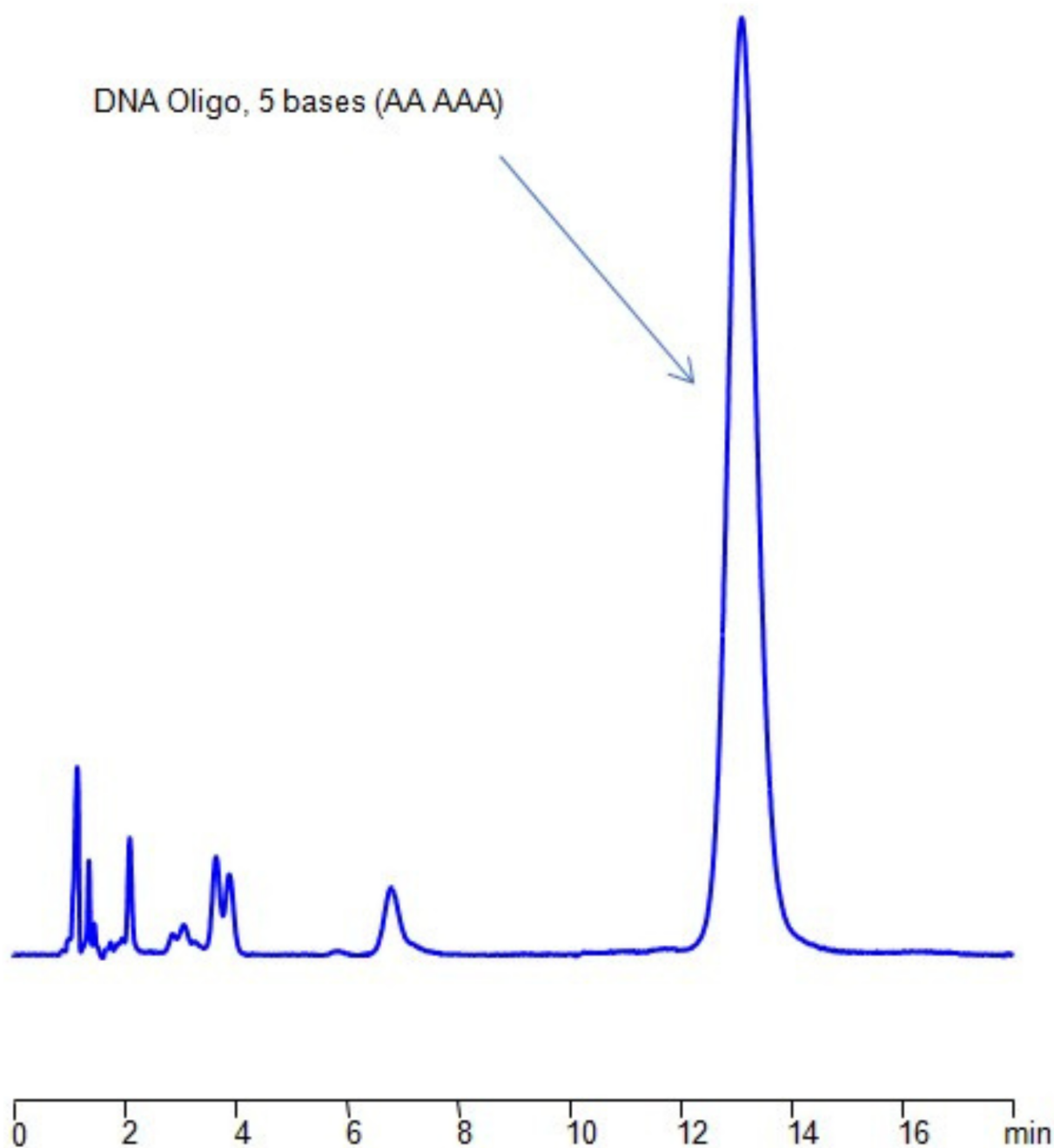


HPLC Method for Analysis of Oligonucleotides dA 5 mer on BIST A Column

<https://sielc.com/hplc-method-for-analysis-of-oligo5a>

Chromatogram



Column:	BIST A
Column size:	4.6 × 100 mm, 5 μm
Column part number:	TA-46.100.0510.C
Mobile phase:	MeCN/H ₂ O - 60/40%
Buffer:	TMEDA Formate pH 4.0 - 20 mM
Flow rate:	1.0 mL /min
Detection:	UV 260 nm
Sample:	0.021 mg/ml in EtOH/H ₂ O – 50/50%
Injection volume:	2 μl
LOD	15 ppb

Description

· Separation type: Bridge Ion Separation Technology, or BIST™ by SIELC Technologies · HPLC Method for Analysis of DNA Oligo, 5 bases (AAAAA) on BIST A Column by SIELC Technologies · Synthesis of DNA Oligonucleotide (AAAAA) · The application of a DNA oligo with a sequence “AAAAA” can vary based on the context:

Using SIELC’s newly introduced BIST™ method, this oligonucleotide can be retained on a negatively-charged, cation-exchange BIST™ A column. There are two keys to this retention method: 1) a multi-charged, positive buffer, such as TMEDA formate, which acts as a bridge, linking the negatively charged dye to the negatively-charged column surface and 2) a mobile phase consisting mostly of organic solvent (such as MeCN) to minimize the formation of a solvation layer around the charged analytes. Using this new and unique analysis method, oligonucleotide can be separated, retained, and detected at 260 nm.

Method Parameters

Mobile Phase	MeCN – 60%
Buffer	TMEDA Formate pH 4.0 – 20 mM
Flow Rate	1.0 ml/min
Detection	UV 260 nm
Sample	0.021 mg/ml in EtOH/H ₂ O – 50/50%
Injection volume	1 µl
LOD*	15 ppb
Class of Compounds	Oligonucleotides
Analyzing Compounds	Oligonucleotides

HPLC Column Used

BIST A, 4.6 x 100 mm, 5 µm, 100 A, surface coated

[Order this column at hplc-shop.de →](http://hplc-shop.de)