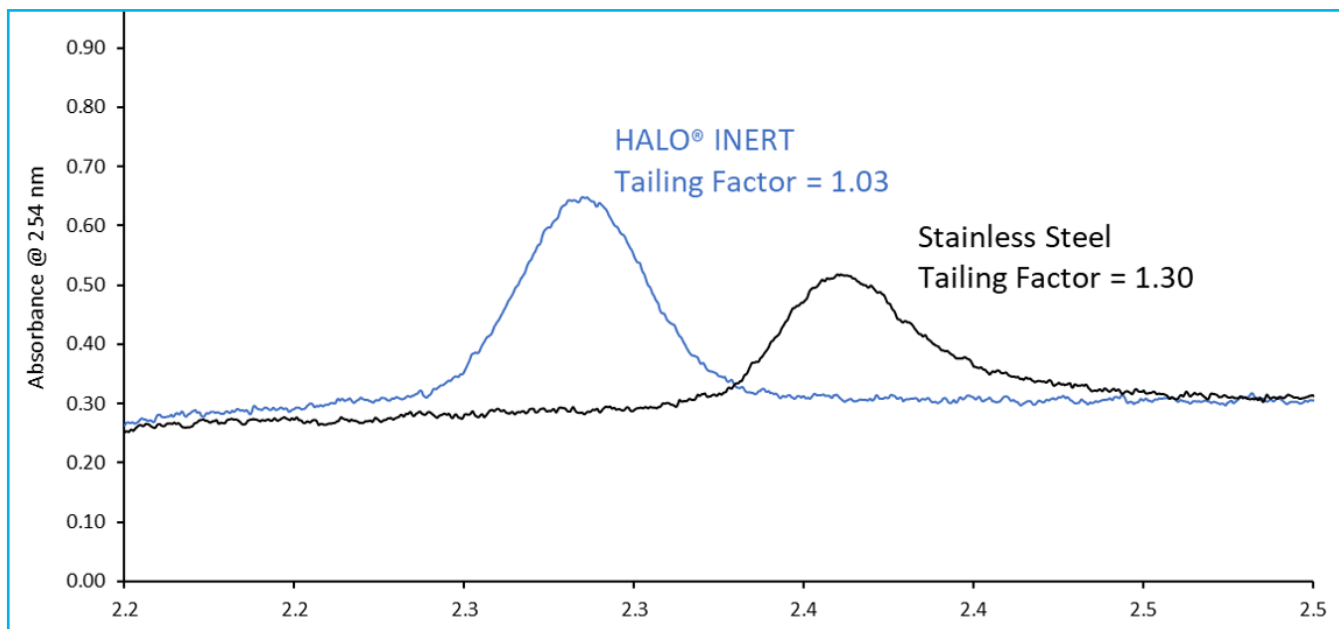




Advantage of Inert Hardware with HALO® OLIGO C18

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TEST CONDITIONS:

Column: HALO 120 Å OLIGO C18, 2.7 µm, 2.1 x 50 mm
 Part Number: P2A62-402
 Mobile Phase A: 100mM TEAA, Adjusted to pH = 8.4
 Mobile Phase B: ACN

Gradient:	Time	%B
	0.0	8
	3.0	10
	3.5	20
	4.0	20
	4.1	8
	8.0	8

Flow Rate: 0.5 mL/min
 Back Pressure: 146 bar
 Temperature: 60 °C
 Injection: 1.0 µL
 Sample Solvent: 10mM Tris HCl/ 1mM EDTA pH = 8.0
 Wavelength: PDA, 254 nm
 Flow Cell: 1 µL
 Data Rate: 40 Hz
 Response Time: 0.05 sec.
 LC System: Shimadzu Nexera X2

PEAK IDENTITIES

- Oligo dT, 15 mer

Oligonucleotides are known to exhibit non-specific adsorption to stainless steel. In this comparison, the advantages of the inert column hardware over stainless steel hardware are demonstrated. The peak area is 46% larger and the tailing factor is 26% lower with the inert column hardware, which is used for HALO® OLIGO C18. Furthermore, the retention time is decreased since non-specific metal interactions are reduced when using the inert hardware.





Expected masses of Main Product (16-mer) and truncated products

Peak of Interest	Theoretical Monoisotopic Mass	[M-H]	2-[M-H]	3-[M-H]	Calculated	Calculated Monoisotopic Mass	PPM
10-mer Poly dT	2978.501	2977.493	1488.243	991.8261	1488.2572	2978.529	9.4
11-mer Poly dT	3282.546	3281.538	1640.265	1093.174	1093.1841	3282.5742	8.59
12-mer Poly dT	3586.592	3585.584	1792.288	1194.523	1194.5339	3586.6236	8.81
13-mer Poly dT	3890.638	3889.63	1944.311	1295.872	1295.8834	3890.6721	8.76
14-mer Poly dT	4194.683	4193.675	2096.334	1397.22	1397.2326	4194.7197	8.75
15-mer Poly dT	4498.729	4497.721	2248.357	1498.569	1498.5821	4498.7682	8.71
16-mer Poly dT	4802.775	4801.767	2400.38	1599.917	1599.9272	4802.8035	5.93
16+ Cyano Group	4855.8094	4854.802	2426.897	1617.596	1617.6072	4855.8435	7.02

Actual masses of Main Product (16-mer) and truncated products

