

Supplementary Information for:

Site-specific incorporation of *N*-(deoxyguanosin-8-yl)-2-acetylaminofluorene (dG-AAF) into oligonucleotides using modified "ultra-mild" DNA synthesis.

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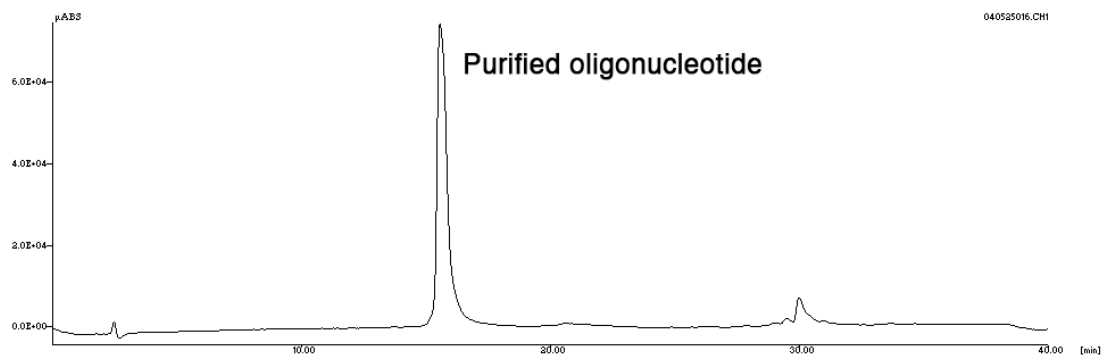
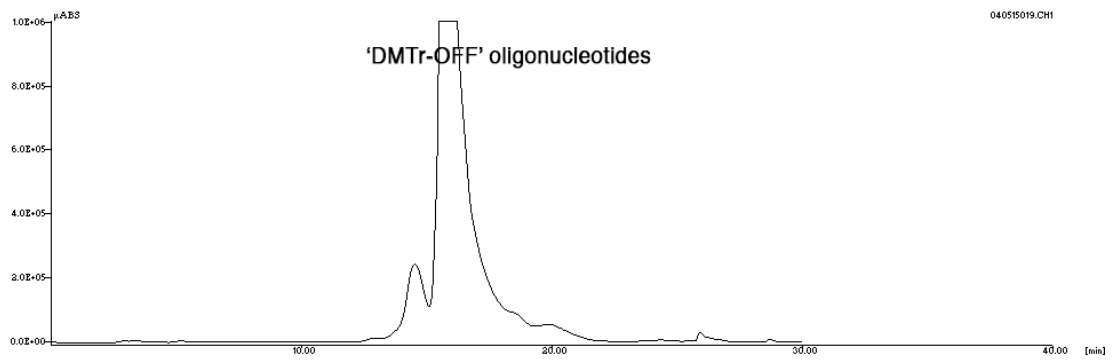
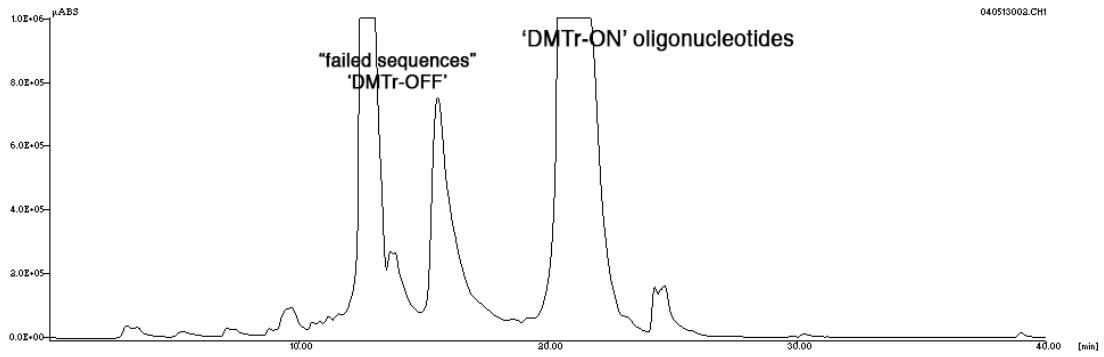
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- p. 1** **Information on MS analyses**
- p. 2** **HPLC trace of purification of 24-AAF**
- p. 3-6** **ESI-MS Spectra of oligonucleotides listed in Table 2**

INFORMATION ON MS ANALYSES

The NMR Spectra were recorded on a Bruker ARX-300 MHz, the HR-MALDI on an Ionspec FT MS Ultima. The 9- and 24-mer were analyzed by nanoESI on a Micromass quadrupole time-of-flight (Q-TOF) mass spectrometer in negative mode; the 60-, 90- and 120-mer were analyzed by LC-ESI-MS in negative mode on a Q-TOF-Ultima coupled to Cap-LC (Waters); The LC step of the ESI-MS analysis was performed on a Waters Xterra RP-C18 column (5 µm, 0.32x50 mm), at 60°C with a flow rate of 8 µl/min, with a 0-50% B gradient over 15 min; Buffer A: 25 mM aq. Me₂NBu.H₂CO₃ (pH 8.4); Buffer B: CH₃CN. The mass deconvolution was realized on the MaxEnt1 software.

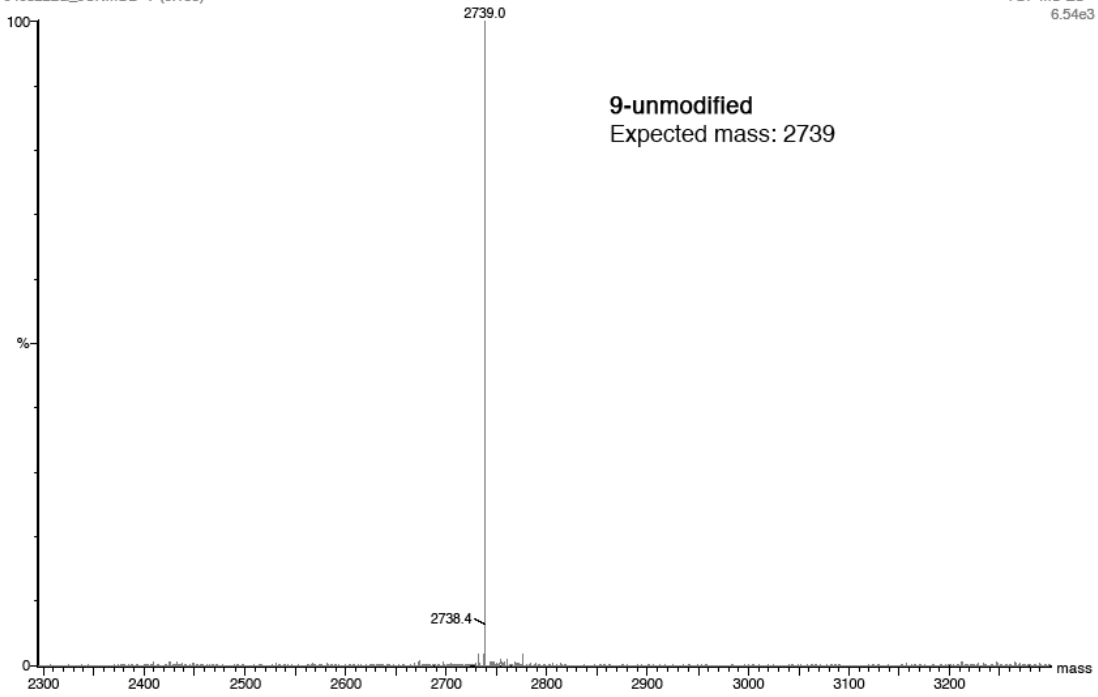
HPLC traces of 24-AAF: crude reaction mixture, after DMTr-On and DMTr-Off HPLC purification



ESI-MS spectra of 9-unmodified and 9-AAF

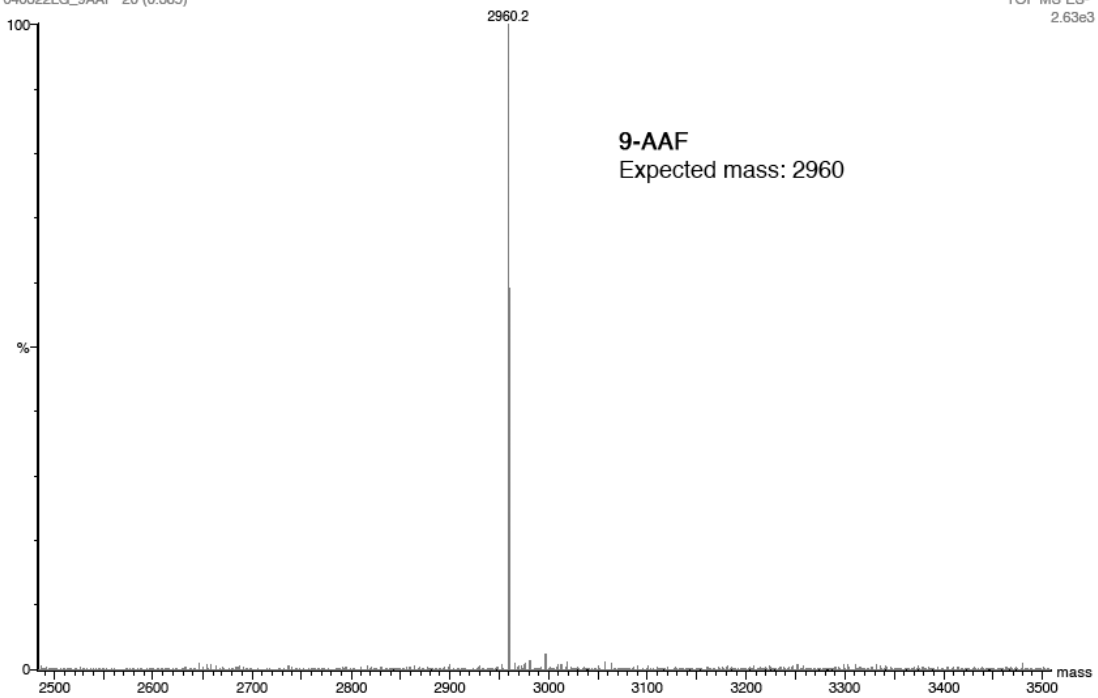
QTOF22-Mar-2004L. Gillet, 9unmod
040322LG_9UNMOD 7 (0.138)

TOF MS ES-
6.54e3



QTOF22-Mar-2004L. Gillet, 9AAF
040322LG_9AAF 20 (0.385)

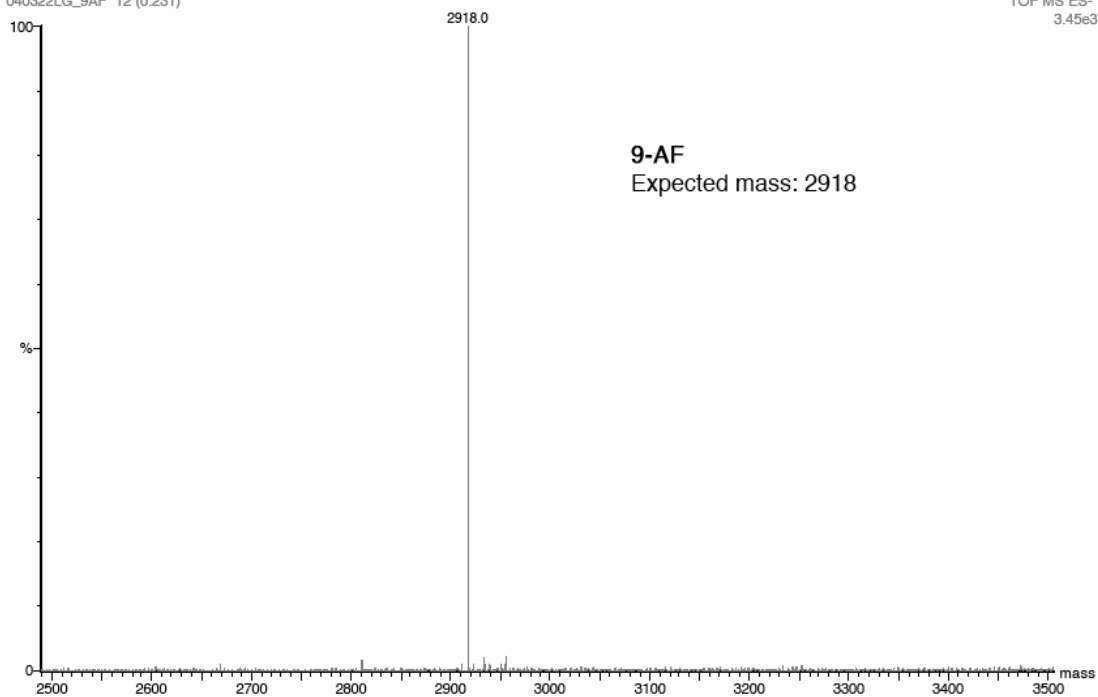
TOF MS ES-
2.63e3



ESI-MS spectra of 9-AF and 24-AAF

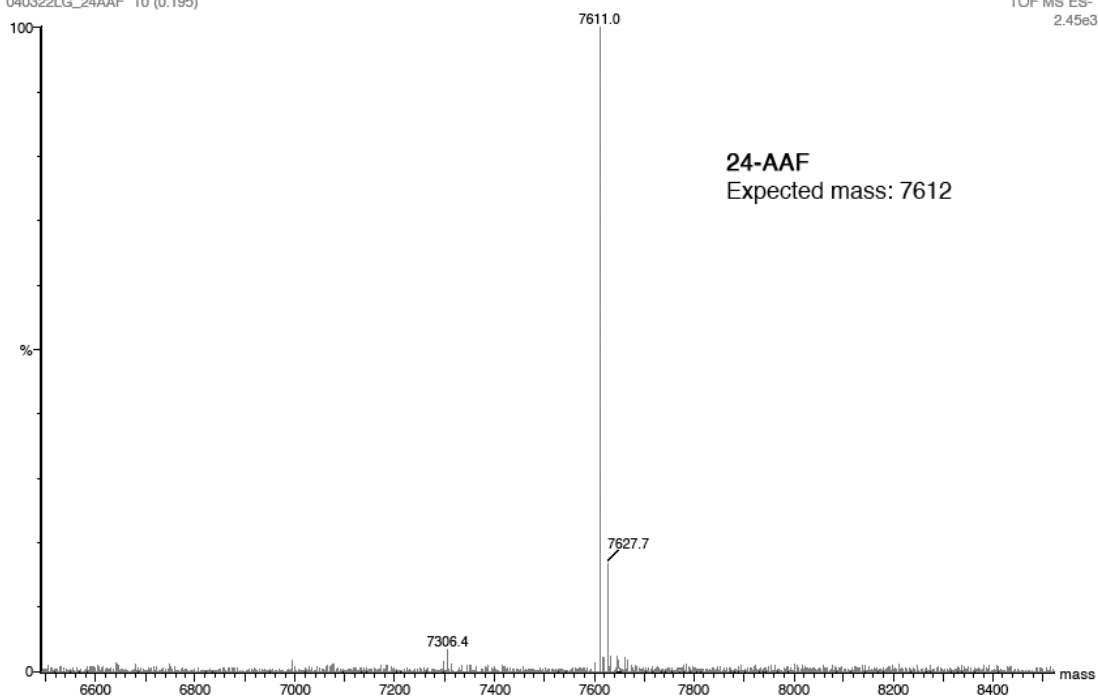
QTOF22-Mar-2004L. Gillet, 9AF
040322LG_9AF 12 (0.231)

TOF MS ES-
3.45e3



QTOF22-Mar-2004L. Gillet, 24AAF
040322LG_24AAF 10 (0.195)

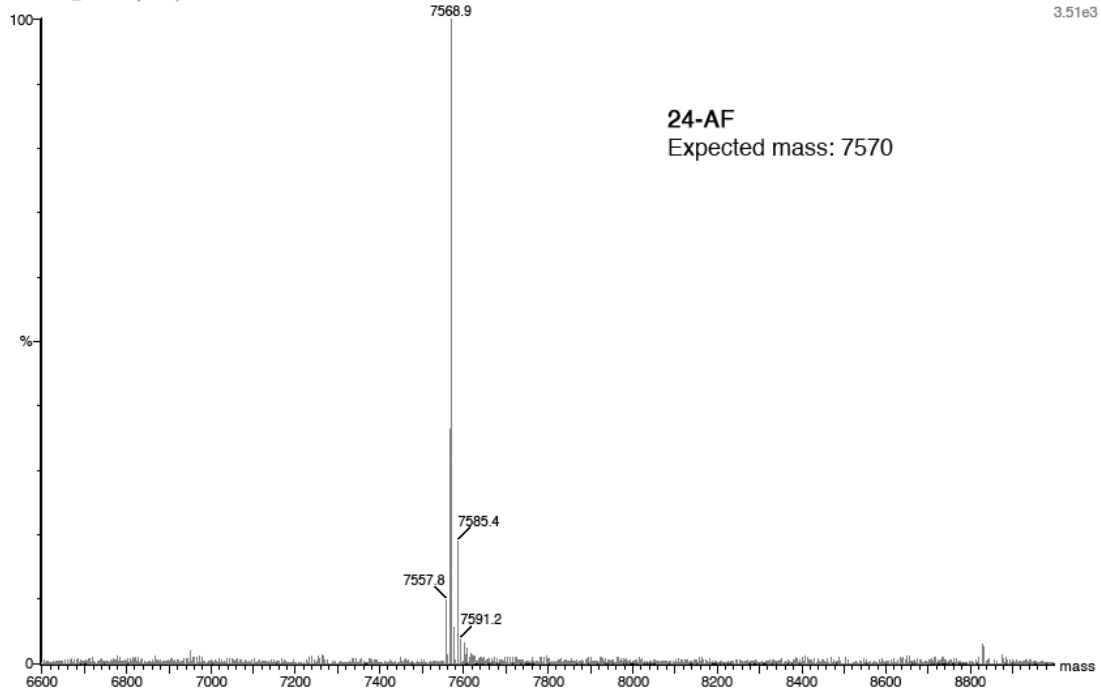
TOF MS ES-
2.45e3



ESI-MS spectra of 24-AF and 60-AAF

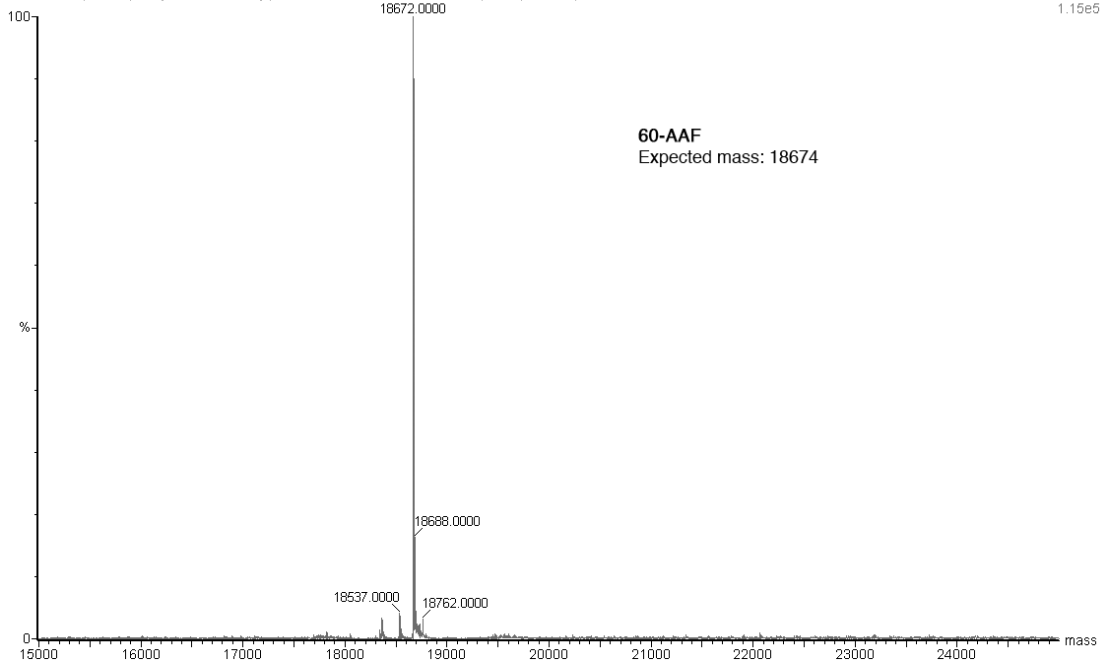
QTOF22-Mar-2004L. Gillet, 24AF
040322LG_24AF 7 (0.138)

TOF MS ES-
3.51e3



60AAF
60AAF 930 (17.491) M1 [Ev-122799,t29] (Gs,0.300,600:2000,1.00,L33,R33); Cm (887:995)

1: TOF MS ES-
1.15e5



ESI-MS spectra of 90-AAF and 120-AAF

