Supporting Information

Design and properties of ligand-conjugated guanine oligonucleotides for recovery of mutated G-quadruplexes

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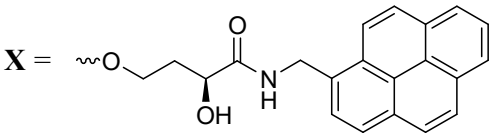
Content

PySG$_3$ = 5'-**X**pGpGpGpTpT-3'

X = 

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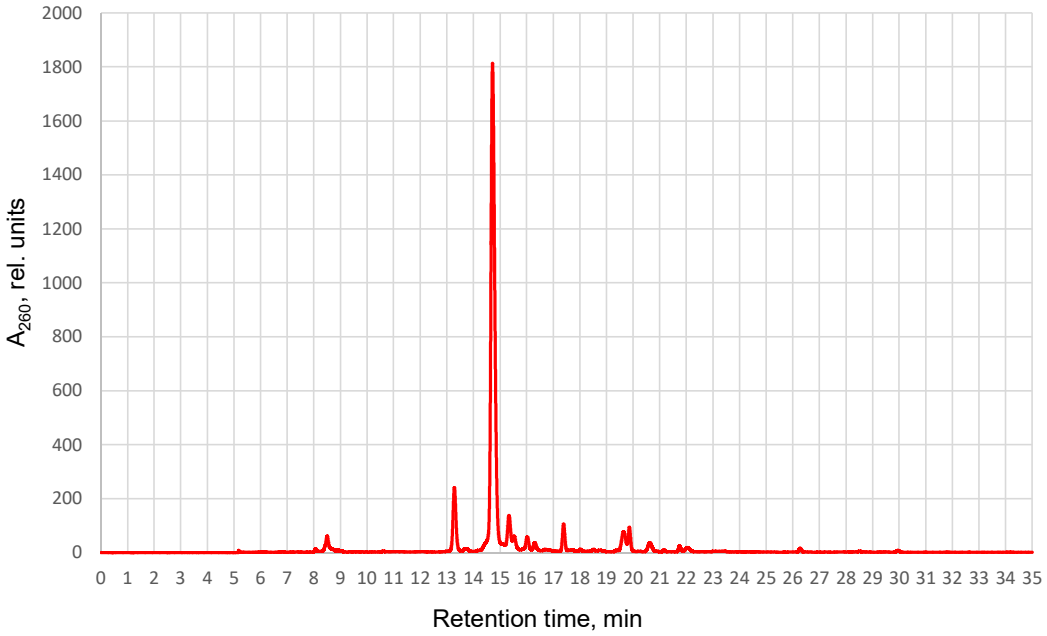

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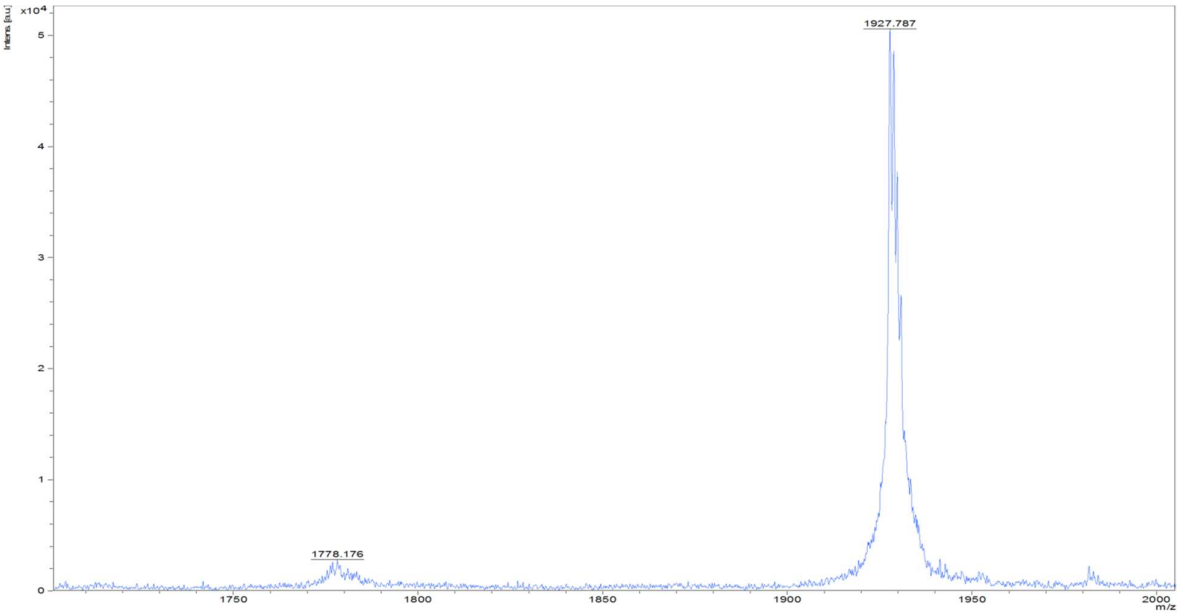

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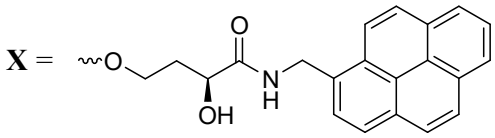
X = 

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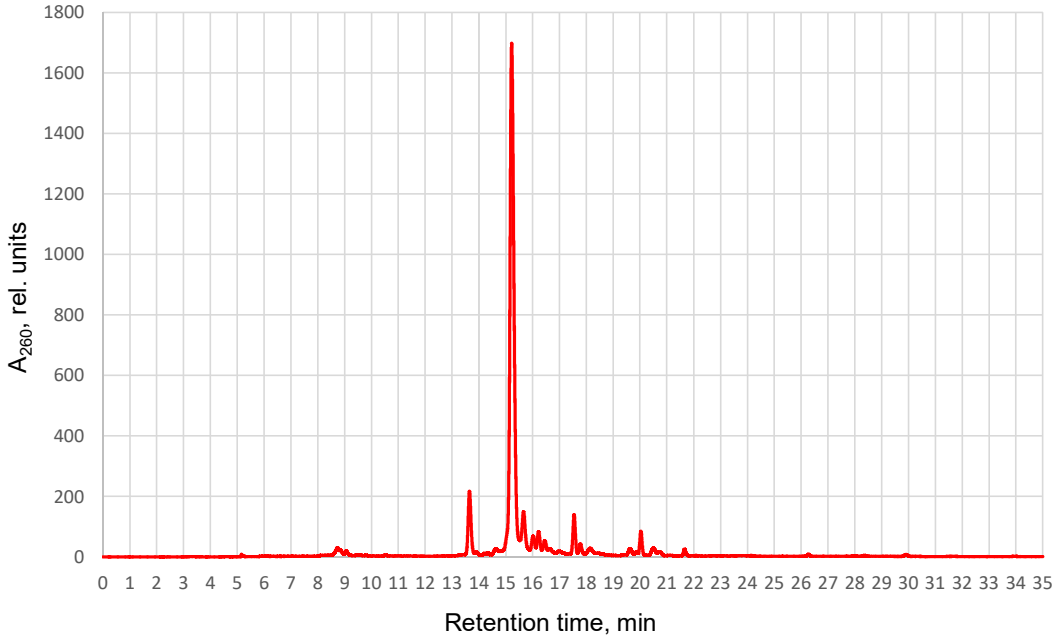

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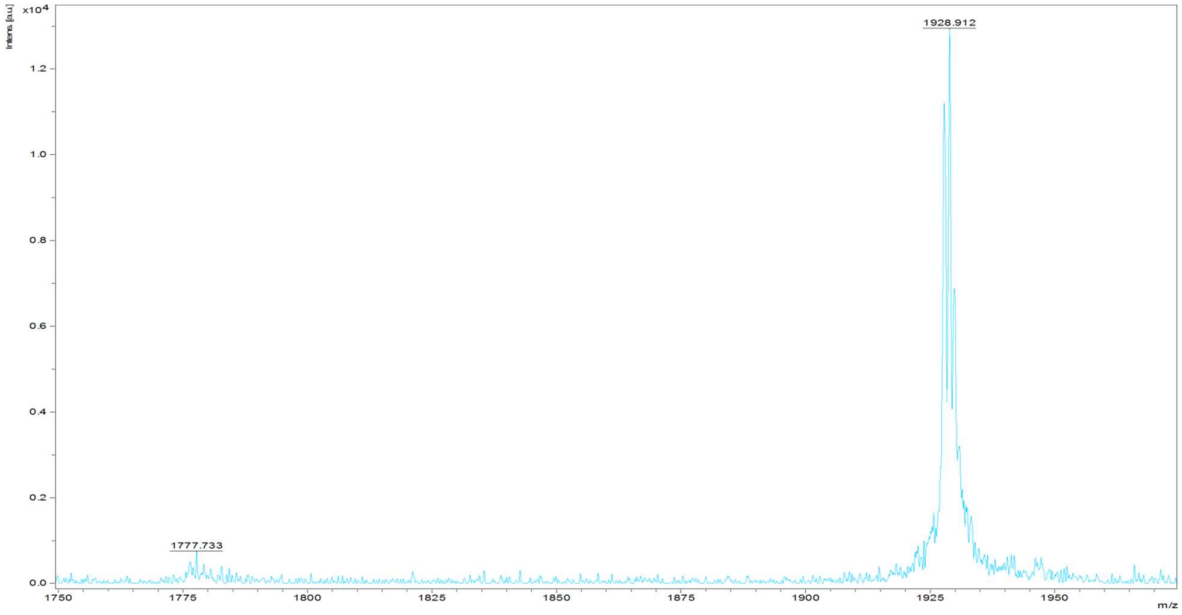

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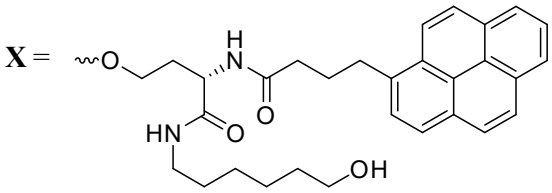
X = 

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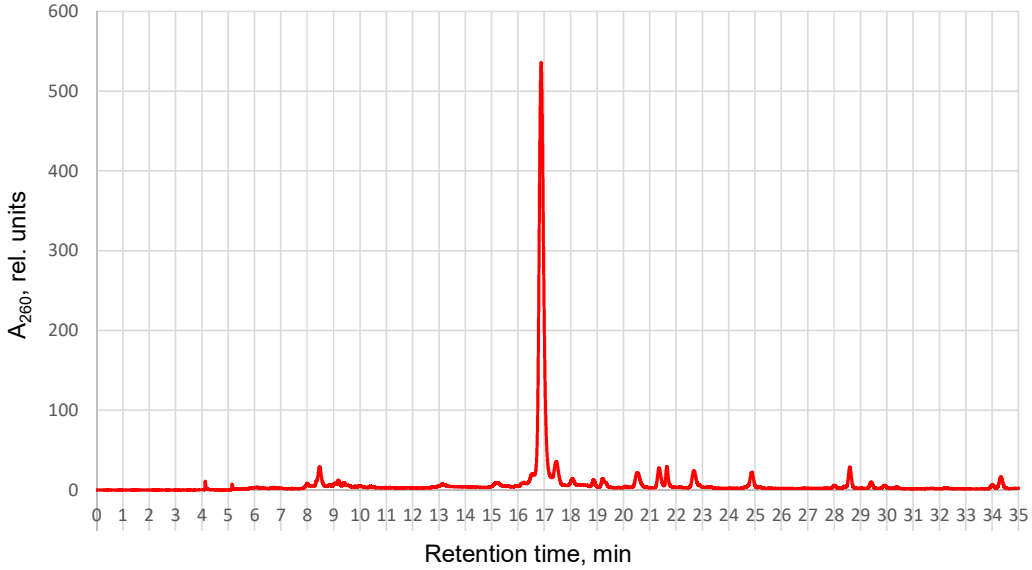

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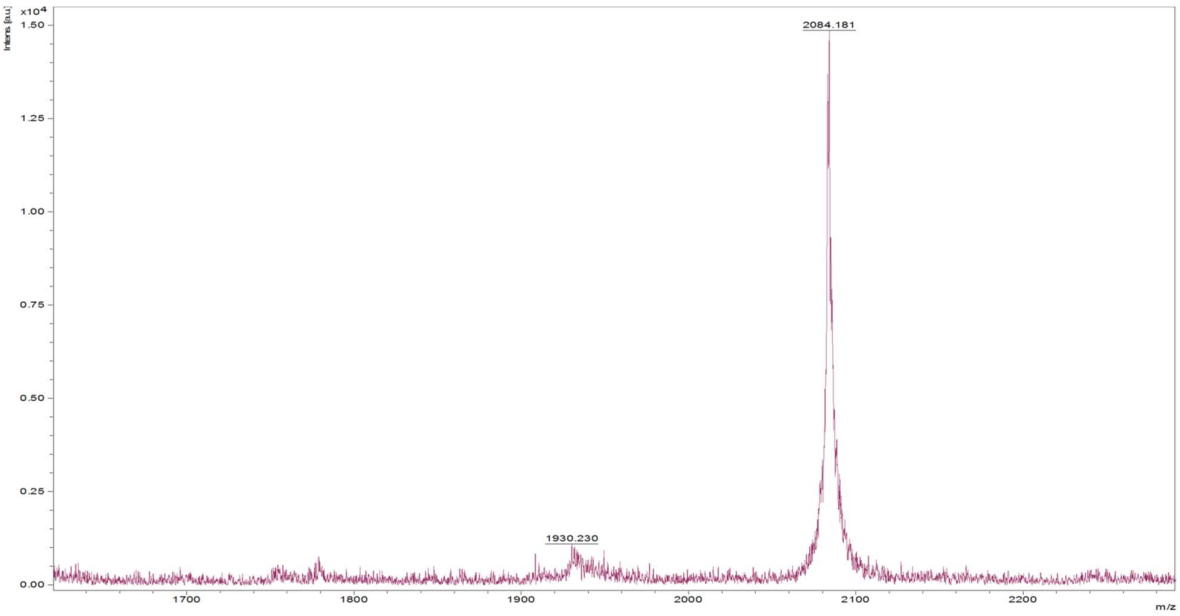

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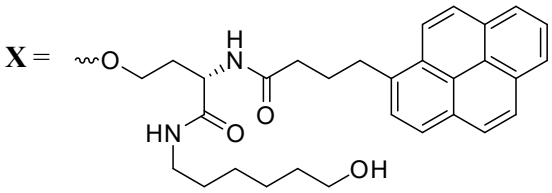
X = 

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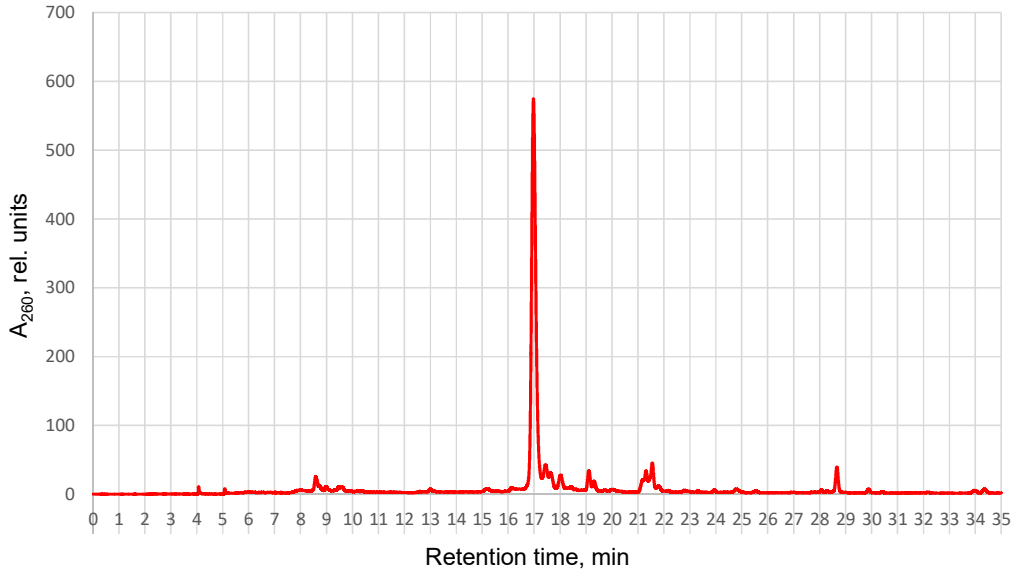

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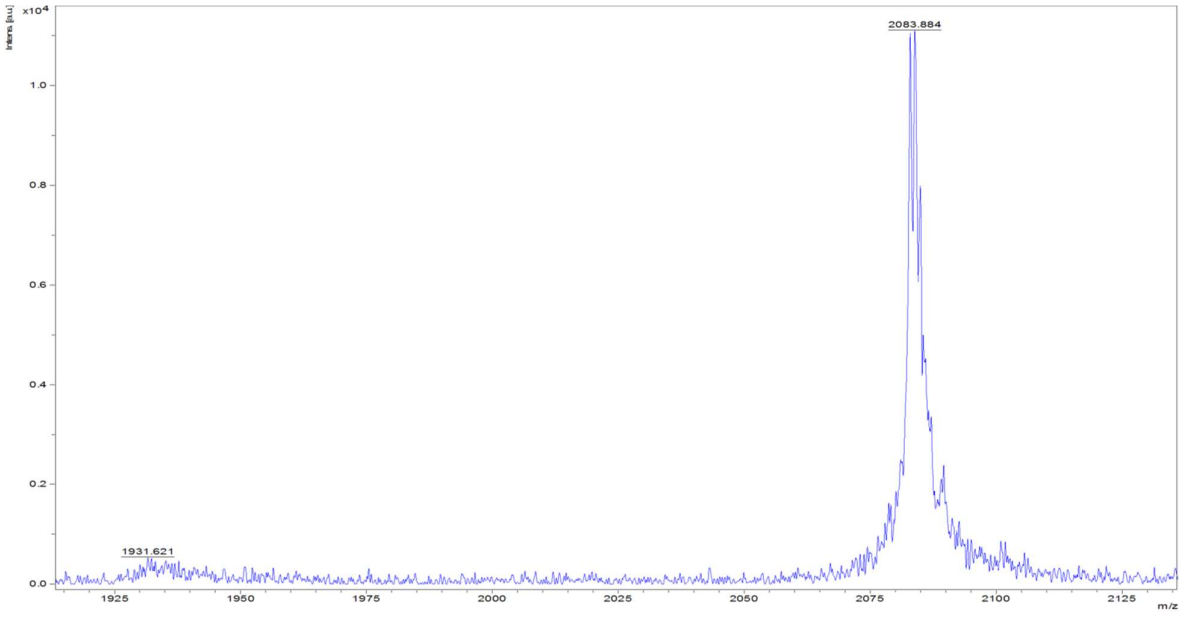

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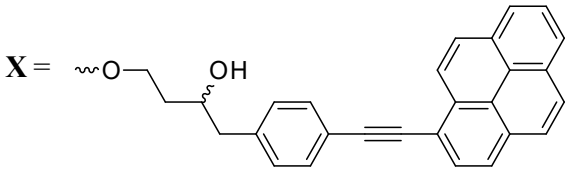
X = 

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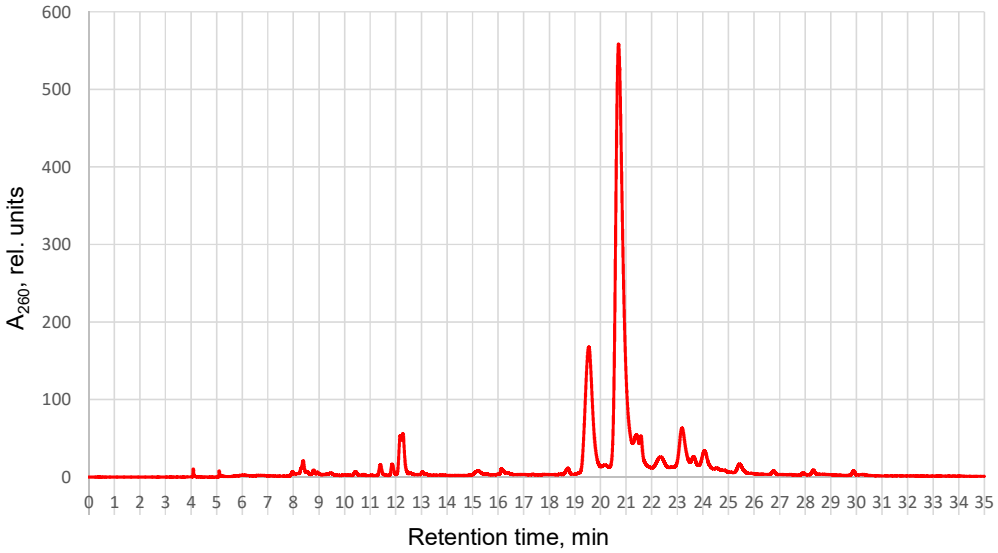

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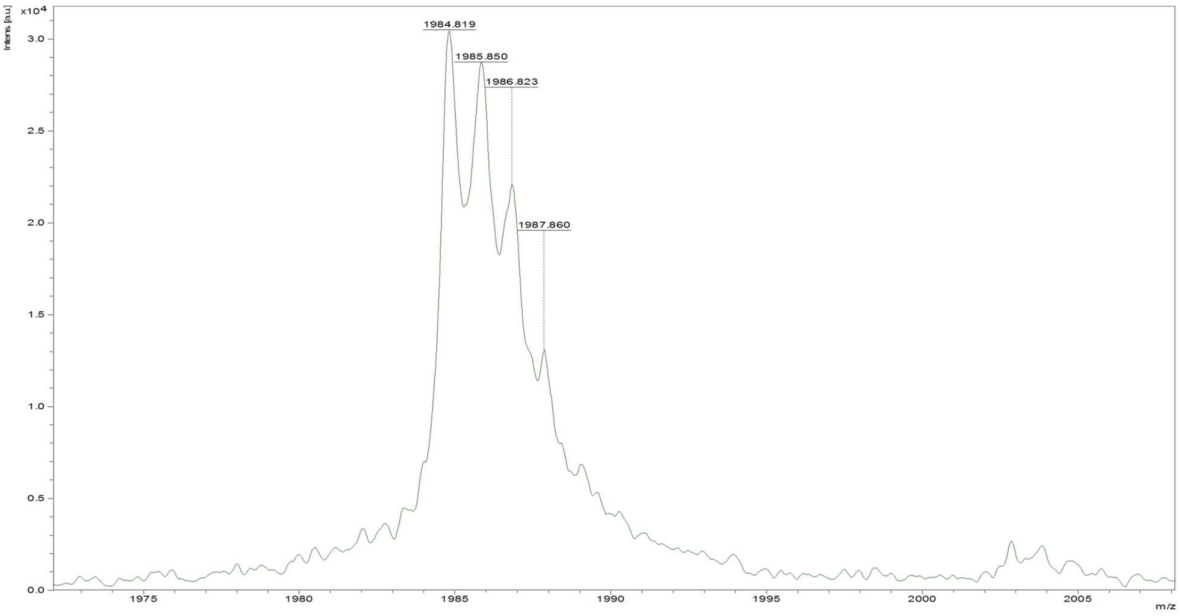

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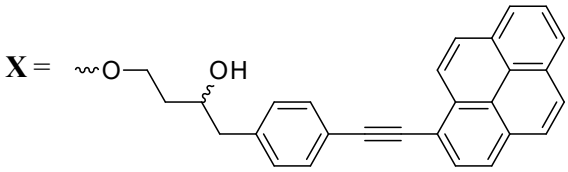
X = 

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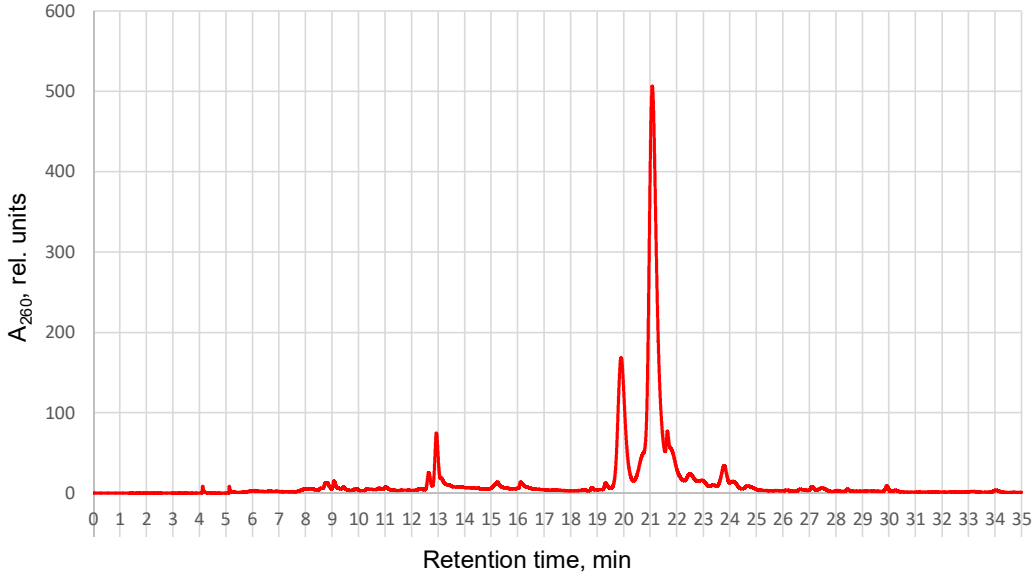

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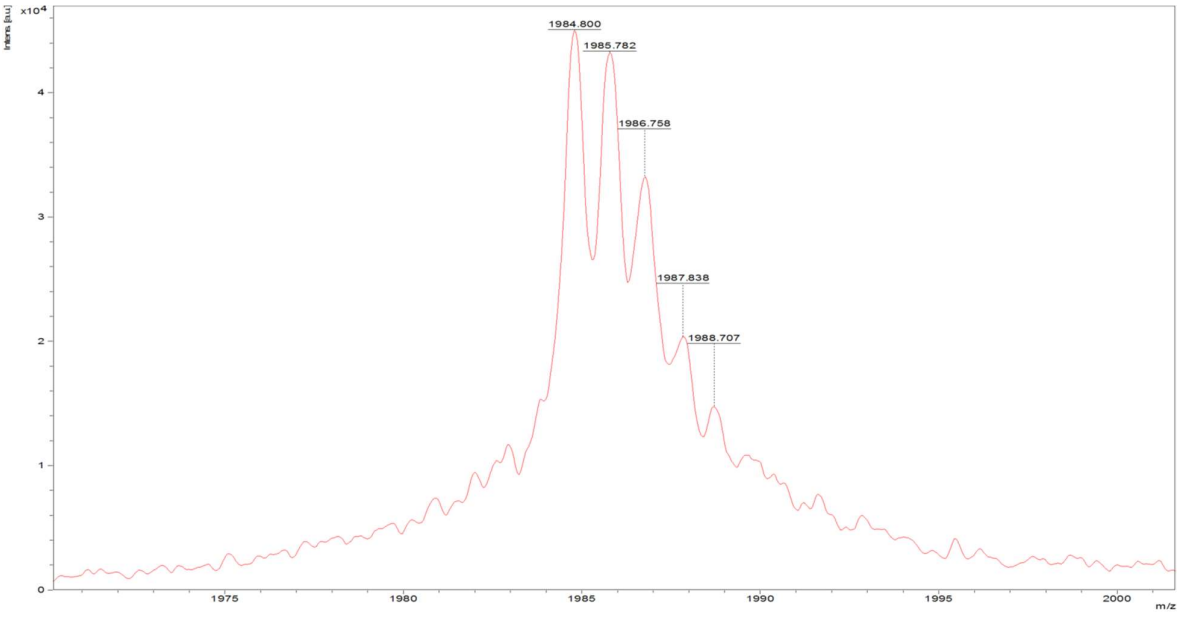

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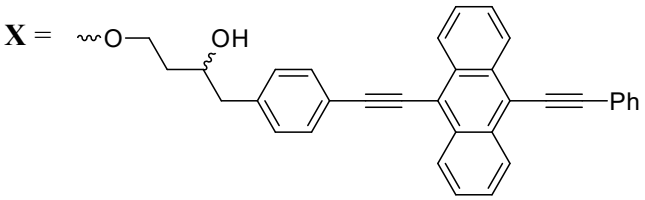
X = 

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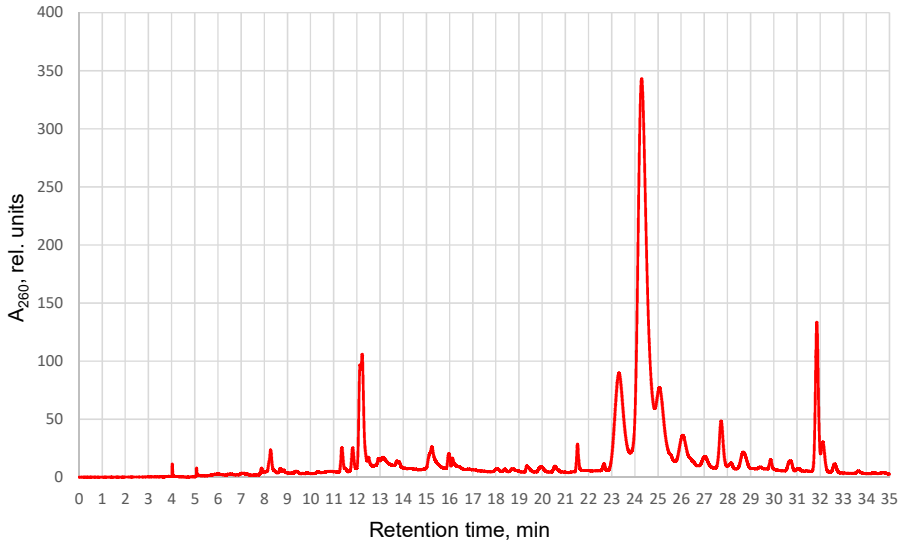

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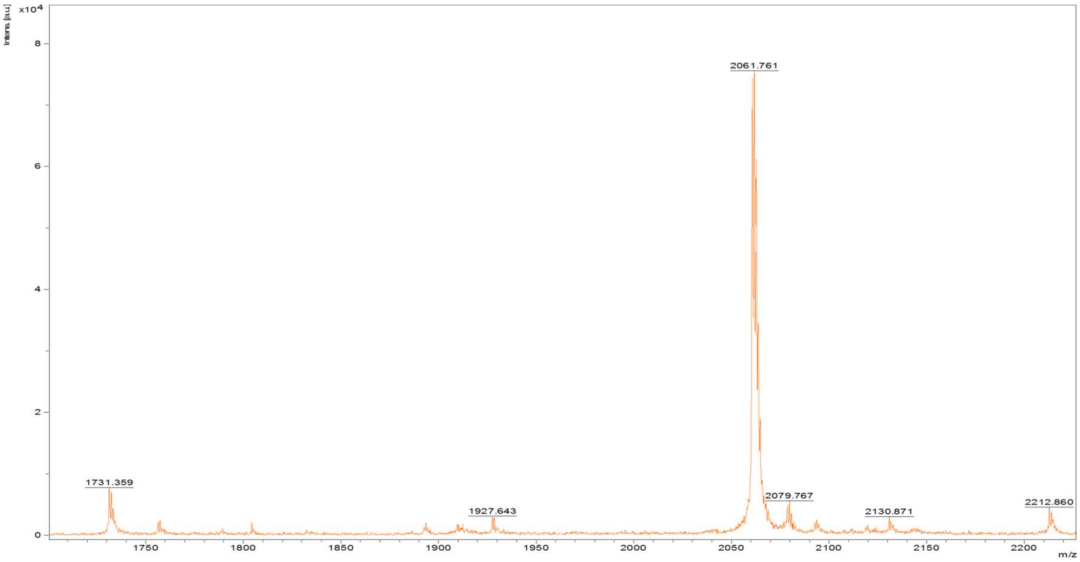

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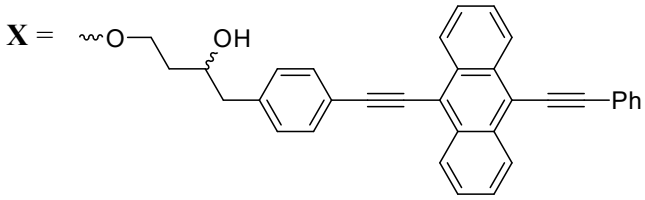
X = 

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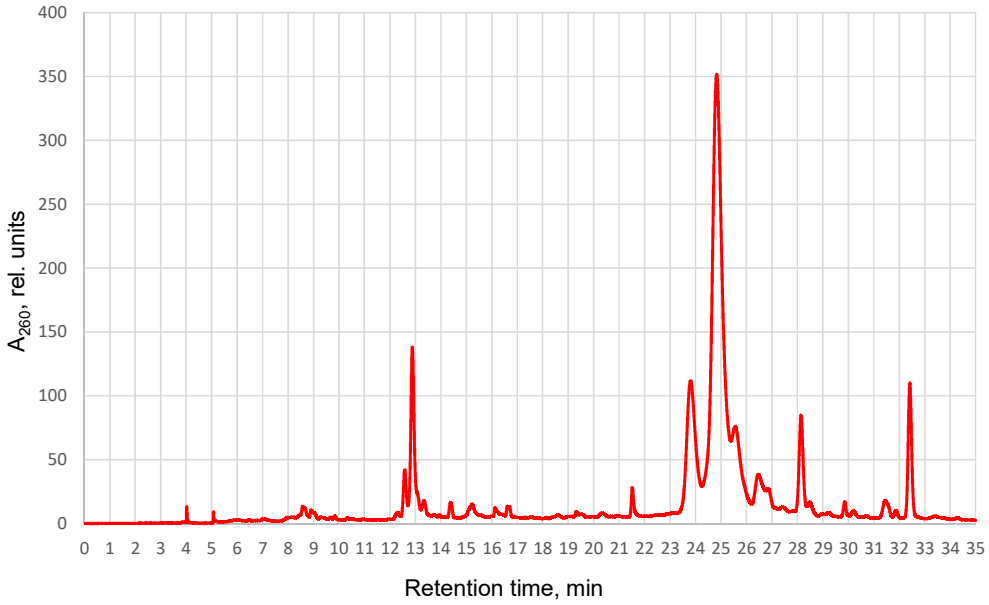

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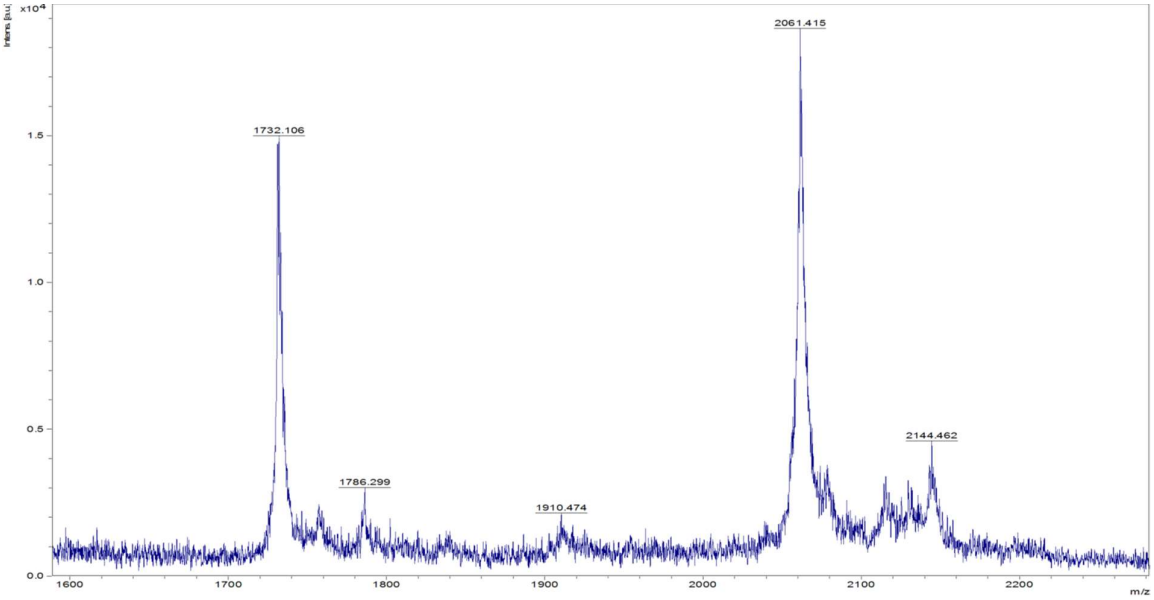

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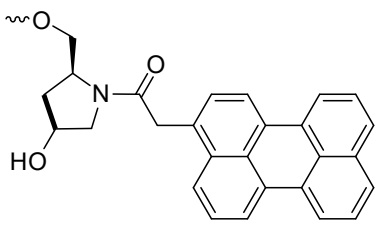
X = 

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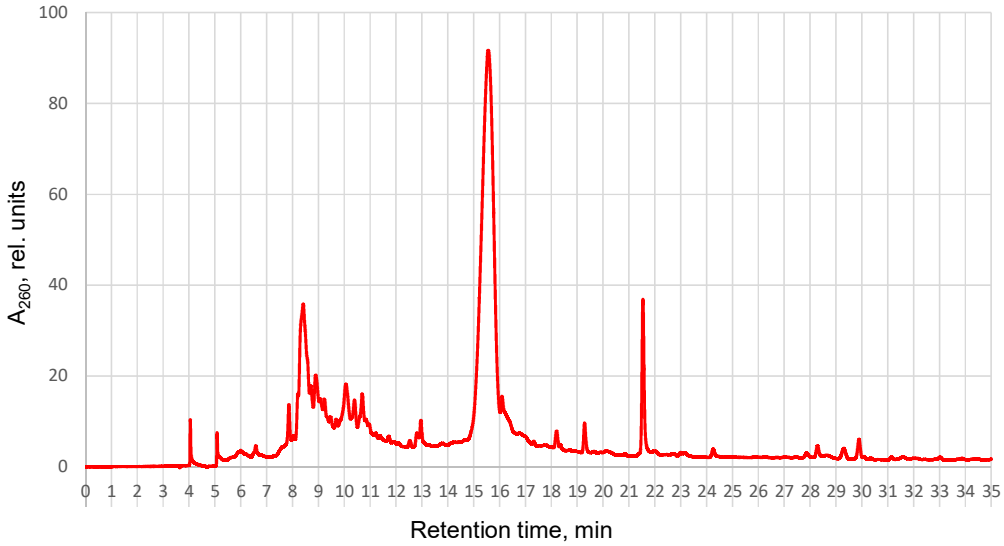

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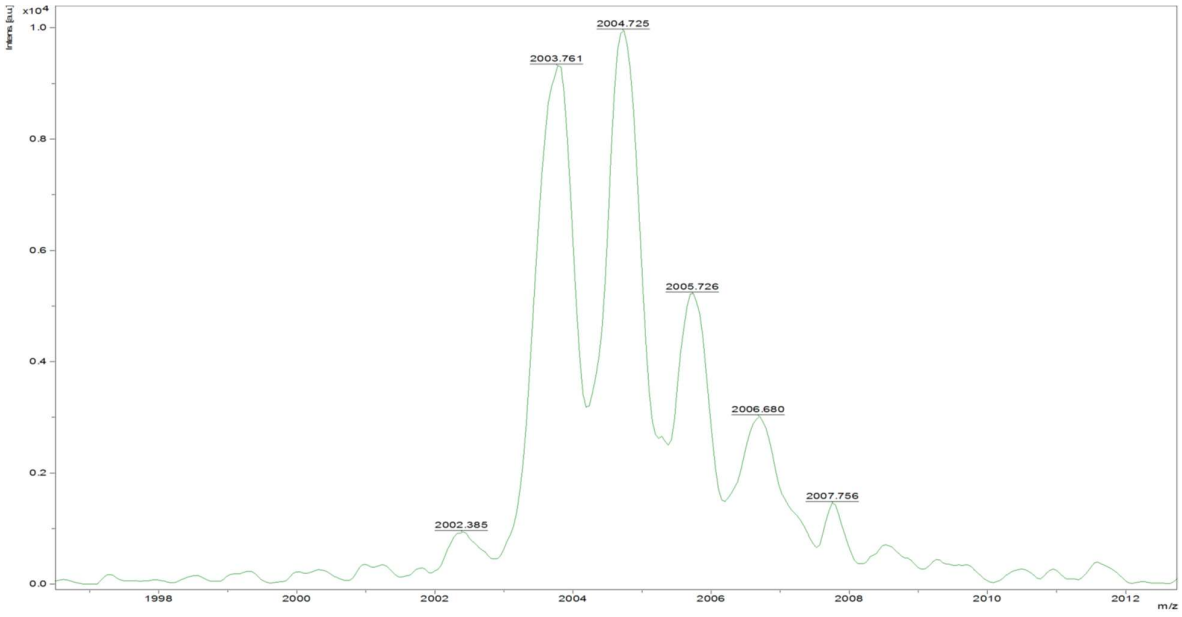

G_3Per = 5'-TpTpGpGpGp**X**-3'

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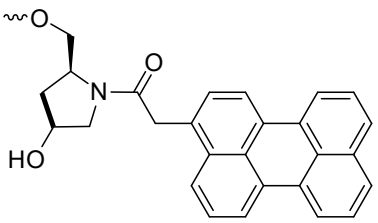

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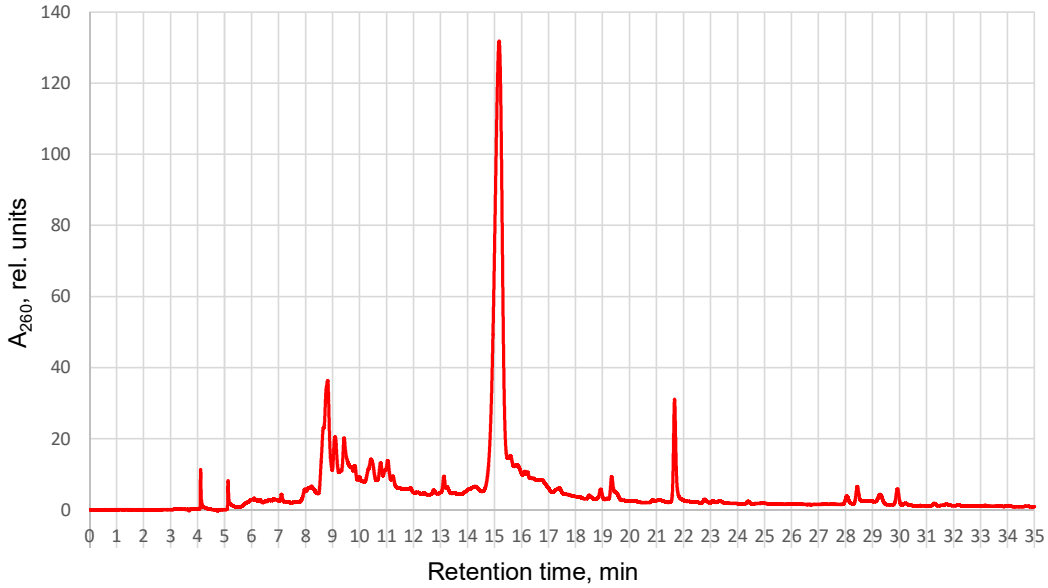

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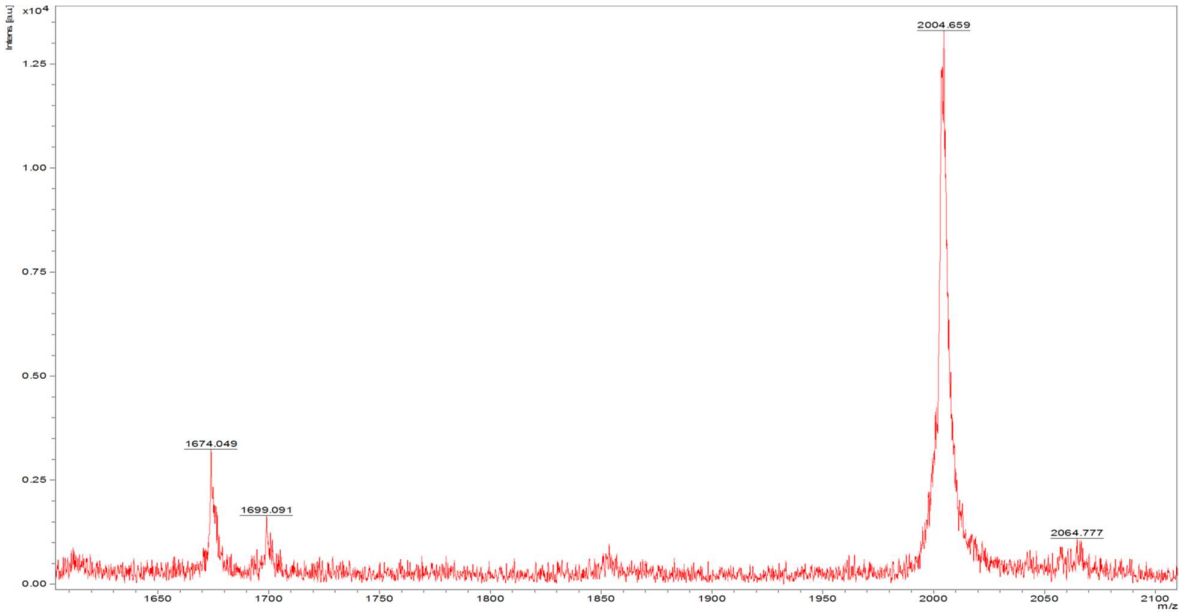
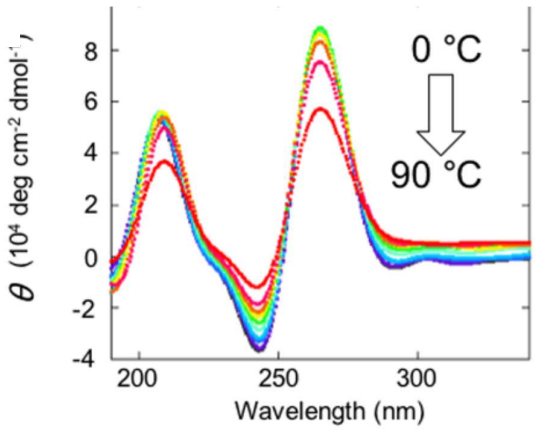
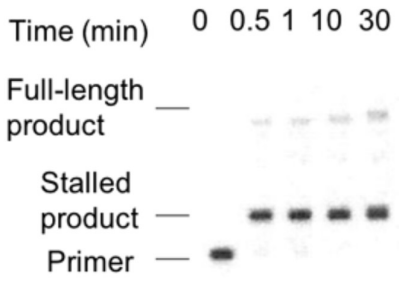




CD spectra of 10 μM VEGF native G4. All the experiments were performed in a buffer consisting of 10 mM Tris- HCl (pH 7.5), 8 mM $MgCl_2$, and 50 mM KCl [1].



Denaturing-PAGE images of replication products from a native VEGF containing template in a buffer consisting of 10 mM Tris-HCl (pH 7.5), 8 mM $MgCl_2$, and 10 mM KCl with 1 μM primer, 1 μM template, 250 μM dNTPs, and 1 μM KF exo- at 37 °C [1].

Reference:

[1] Takahashi, S.; Kim, K. T.; Podbevsek, P.; Plavec, J.; Kim, B. H.; Sugimoto, N., Recovery of the Formation and Function of Oxidized G-Quadruplexes by a Pyrene-Modified Guanine Tract. *J. Am. Chem. Soc.* **2018,** 140, (17), 5774-5783.