Supporting Information

Vacuum-UV Induced DNA Strand Breaks – Influence of the Radiosensitizers 5-Bromouracil and 8-Bromoadenine

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SI.1 Overview of the cross sections for SSBs for the different non-modified and brominated DNA sequences upon VUV irradiation.

DNA sequence	Cross section for SSBs in 10^{-16} cm²	Substrate	Radiation
5'-d(G_{12})	(2.3 ± 0.2)	CaF_2	VUV
5'-d(TT($G^{5Br}UG)_3$TT)	(7.9 ± 0.4)	CaF_2	VUV
5'-d(C_{12})	(1.7 ± 0.1)	CaF_2	VUV
5'-d(TT($C^{5Br}UC)_3$TT)	(10.2 ± 1.1)	CaF_2	VUV
5'-d(T_{12})	(2.1 ± 0.2)	CaF_2	VUV
5'-d(TT($T^{5Br}UT)_3$TT)	(10.5 ± 1.3)	CaF_2	VUV

SI.2 Overview of the cross sections for SSBs for the different DNA sequences modified with ^{5Br}U upon VUV irradiation.

DNA sequence	Cross section for SSBs in 10^{-16} cm²	Substrate	Radiation
5'-d(TTG^{5Br}UTT)	(3.9 ± 1.2)	CaF_2	VUV
5'-d(TTGA^{5Br}UTT)	(3.5 ± 1.3)	CaF_2	VUV
5'-d(TTGAA^{5Br}UTT)	(3.4 ± 0.8)	CaF_2	VUV
5'-d(TTGAAA^{5Br}UTT)	(3.0 ± 0.5)	CaF_2	VUV
5'-d(TTGAAAA^{5Br}UTT)	(3.1 ± 0.7)	CaF_2	VUV
5'-d(TTGAAAAA^{5Br}UTT)	(2.5 ± 0.3)	CaF_2	VUV

SI.3 Overview of the cross sections for SSBs of the different DNA sequences modified with ^{8Br}A irradiated on two different substrates upon VUV irradiation.

DNA sequence	**Cross section for SSBs in 10^{-16} cm²**	**Substrate**	**Radiation**
5'-d(TT(ATA)$_3$TT)	(2.2 ± 0.7)	CaF_2	VUV
5'-d(TT(^{8Br}ATA)$_3$TT)	(2.7 ± 0.6)	CaF_2	VUV
5'-d(TT(ATA)$_3$TT)	(4.1 ± 0.6)	Si	VUV and indirect LEE
5'-d(TT(^{8Br}ATA)$_3$TT)	(3.9 ± 0.4)	Si	VUV and indirect LEE