

Supplementary files

Results for **Figures 4-9** are presented as mean, $\pm$ SD calculated from 3 experiments and compared to the untreated controls (K) - at 0 h or 1 h time point, if timeframe is indicated, respectively. Statistical significance was calculated from a *t*-test where $p < 0.05$ and indicated by an asterisk (*). Below in Tables are bolded.

Table S1. Statistics for Figures 4-9

Figure 4

A

NHDF					Me45				
	<u>k</u>	<u>k+UV</u>	<u>Gen</u>	<u>Gen+UV</u>		<u>k</u>	<u>k+UV</u>	<u>Gen</u>	<u>Gen+UV</u>
0h	0.5	0.00159	0.13878	0.00014	0h	0.5	0.00812	7.13E-05	3.32E-05
24h	0.00019	2.12E-05	3.22E-05	0.00019	24h	0.00059	0.00086	0.5	0.07576
48h	0.00283	1.45E-05	0.00033	0.00052	48h	0.00033	0.29764	0.00175	0.00041

B

NHDF					Me45				
	<u>k</u>	<u>k+UV</u>	<u>W5-Gen</u>	<u>W5-Gen+UV</u>		<u>k</u>	<u>k+UV</u>	<u>W5-Gen</u>	<u>W5-Gen+UV</u>
0h	0.5	0.00159	0.00283	0.00834	0h	0.5	0.00812	7.13E-05	3.32E-05
24h	0.00019	2.12E-05	8.32E-05	1.38E-05	24h	0.00059	0.00086	0.5	0.07576
48h	0.00283	1.45E-05	0.00283	0.00114	48h	0.00033	0.29764	0.00175	0.00041

C

NHDF					Me45				
	<u>k</u>	<u>k+UV</u>	<u>WBn-Gen</u>	<u>WBn-Gen+UV</u>		<u>k</u>	<u>k+UV</u>	<u>WBn-Gen</u>	<u>WBn-Gen+UV</u>
0h	0.5	0.00159	0.00834	0.00114	0h	0.5	0.00812	3.68E-05	4.08E-05
24h	0.00019	2.12E-05	0.00114	5.07E-05	24h	0.00059	0.00126	0.39437	0.05322
48h	0.00283	1.45E-05	0.00098	0.13878	48h	0.00033	0.29764	0.00017	0.00073

D

NHDF					Me45				
	<u>k</u>	<u>k+UV</u>	<u>4'-L-Gen</u>	<u>4'-L-Gen+UV</u>		<u>k</u>	<u>k+UV</u>	<u>4'-L-Gen</u>	<u>4'-L-Gen+UV</u>
0h	0.5	0.00159	0.00065	0.00834	0h	0.5	0.00375	0.00812	0.00036
24h	0.00019	2.12E-05	0.04012	3.22E-05	24h	0.00043	0.00091	0.37456	0.09853
48h	0.00283	1.45E-05	0.00033	0.00283	48h	0.00033	0.29764	0.05322	0.00621

Figure 5**A**

NHDF					Me45				
	<u>k</u>	<u>k+UV</u>	<u>Gen</u>	<u>Gen+UV</u>		<u>k</u>	<u>k+UV</u>	<u>Gen</u>	<u>Gen+UV</u>
1h	0.5	0.00423	0.00198	0.01648	1h	0.5	0.01352	0.01063	0.00159
24h	0.5	0.08656	0.00283	0.13878	24h	0.5	0.00143	0.02521	0.00061
48h	0.5	0.00569	0.00423	0.00489	48h	0.5	0.40977	0.01352	0.18704

B

NHDF					Me45				
	<u>k</u>	<u>k+UV</u>	<u>Gen</u>	<u>Gen+UV</u>		k	k+UV	W5-Gen	W5-Gen+UV
1h	0.5	0.00423	0.00569	0.00098	1h	0.5	0.01352	0.14913	0.00016
24h	0.5	0.08656	0.00346	0.00661	24h	0.5	0.00143	0.40972	0.00283
48h	0.5	0.00177	0.02328	0.00423	48h	0.5	0.40972	0.05138	0.19562

C

NHDF					Me45				
	<u>k</u>	<u>k+UV</u>	<u>Gen</u>	<u>Gen+UV</u>		k	k+UV	W5-Gen	W5-Gen+UV
1h	0.5	0.00423	0.00143	0.00368	1h	0.5	0.01352	0.03083	0.00423
24h	0.5	0.08656	0.13878	0.03164	24h	0.5	0.00143	0.00021	0.00008
48h	0.5	0.00177	0.32651	0.00368	48h	0.5	0.40972	0.5	0.32651

D

NHDF					Me45				
	<u>k</u>	<u>k+UV</u>	<u>Gen</u>	<u>Gen+UV</u>		k	k+UV	W5-Gen	W5-Gen+UV
1h	0.5	0.00423	0.11347	0.01648	1h	0.5	0.01352	0.40972	0.00159
24h	0.5	0.08656	0.00024	0.01063	24h	0.5	0.00143	0.00011	0.00233
48h	0.5	0.00177	0.00039	0.5	48h	0.5	0.40972	0.00014	0.19562

Figure 6**A****NHDF**

k	k+UV	Gen	Gen+UV	W5-Gen	W5-Gen+UV	WBn-Gen	WBn-Gen+UV	4'-L-Gen	4'-L-Gen+UV
0.5	0.00001	0.00007	0.00005	4.32E-06	0.00001	5.96E-06	5.23E-06	0.00001	4.91E-06

B**Me45**

k	k+UV	Gen	Gen+UV	W5-Gen	W5-Gen+UV	WBn-Gen	WBn-Gen+UV	4-L-Gen	4-L-Gen+UV
0.5	0.00011	0.00001	0.00002	0.000065	0.00329	0.00006	0.00005	0.00001	0.00002

Figure 7

A

NHDF

k	k+UV	Gen	Gen+UV	W5-Gen	W5-Gen+UV	WBn-Gen	WBn-Gen+UV	4-L-Gen	4-L-Gen+UV
0.5	0.00376	0.5	0.35862	0.42851	0.02211	0.00174	0.19895	0.00471	0.16078

B

Me45

k	k+UV	Gen	Gen+UV	W5-Gen	W5-Gen+UV	WBn-Gen	WBn-Gen+UV	4-L-Gen	4-L-Gen+UV
0.5	0.22772	0.00077	0.00283	0.011411	0.0045238	0.001225	0.00452	0.00065	0.00356

Figure 8

A

NHDF

	k	Gen	W5-Gen	WBn-Gen	4-L-Gen
apoptosis	0.5	0.00001	0.00002	0.00003	0.00001
G0/G1	0.5	0.41958	0.07742	0.29426	0.24539
S	0.5	0.01401	0.06008	0.19422	0.01189
G2/M	0.5	0.49331	0.00316	0.00054	0.00102

B

NHDF+UV

	k	k+UV	Gen+UV	W5-Gen+UV	WBn-Gen+UV	4-L-Gen+UV
apoptosis	0.5	0.00001	0.00193	0.00007	0.19562	0.00435
G0/G1	0.5	0.00088	0.00685	0.00175	0.00142	0.00506
S	0.5	0.22441	0.15019	0.09342	0.24369	0.35339
G2/M	0.5	0.00009	0.00131	0.00061	0.00032	0.00059

Figure 9

A

Me45

	k	Gen	W5-Gen	WBn-Gen	4-L-Gen
apoptosis	0.5	0.19562	0.00435	0.05171	0.28449
G0/G1	0.5	0.00217	0.00472	0.00953	0.01138
S	0.5	2.26E-06	0.00028	0.00017	0.00072
G2/M	0.5	0.20228	0.47808	0.00835	0.12237

B

Me45+UV

	k	k+UV	Gen+UV	W5-Gen+UV	WBn-Gen+UV	4-L-Gen+UV
apoptosis	0.5	0.00159	0.00001	0.00001	0.00001	0.00159
G0/G1	0.5	0.08978	0.22383	0.29507	0.31588	0.18967
S	0.5	0.00079	0.08498	0.02862	0.00321	0.00343
G2/M	0.5	0.00081	0.00059	0.00249	0.00036	0.00779

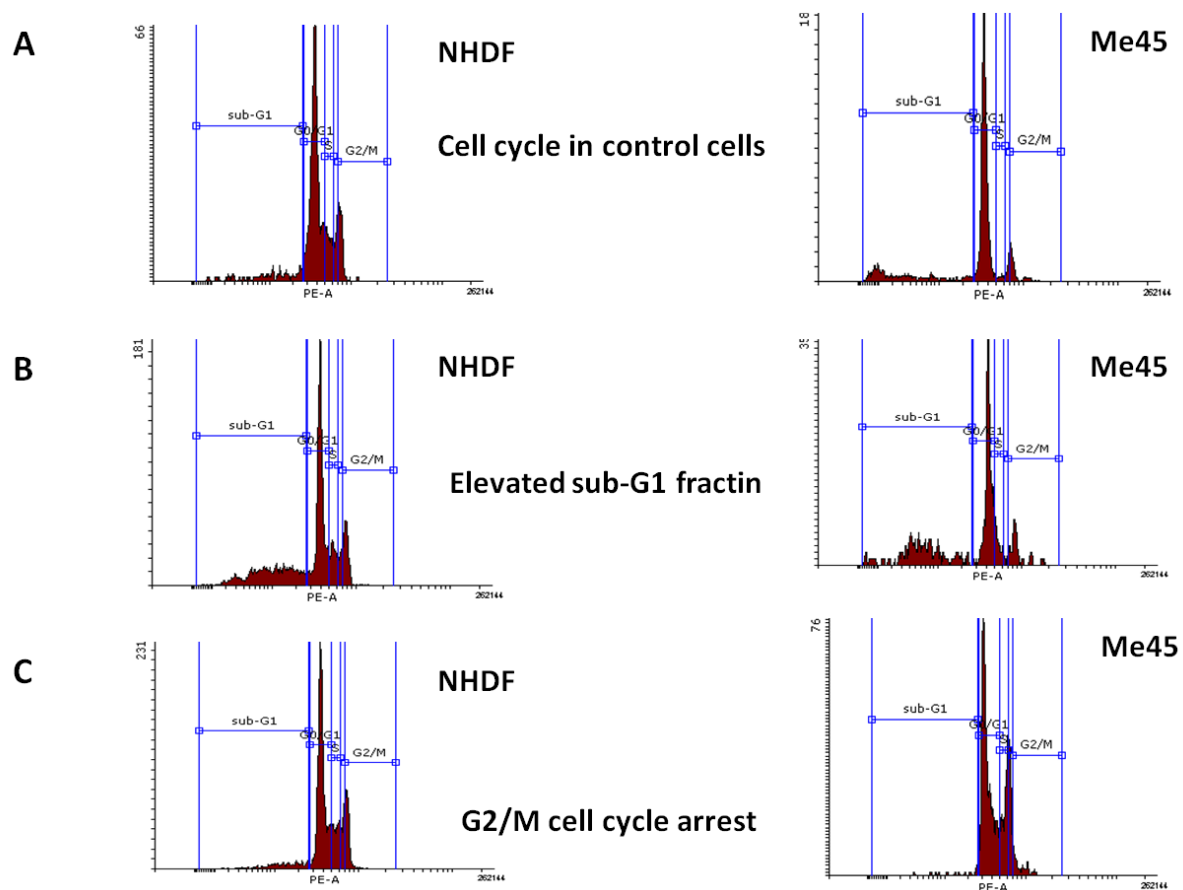


Figure S1. Representative cell cycle histograms of control NHDF and Me45 cells (A); after compounds addition (B) and compounds with UV radiation (C).

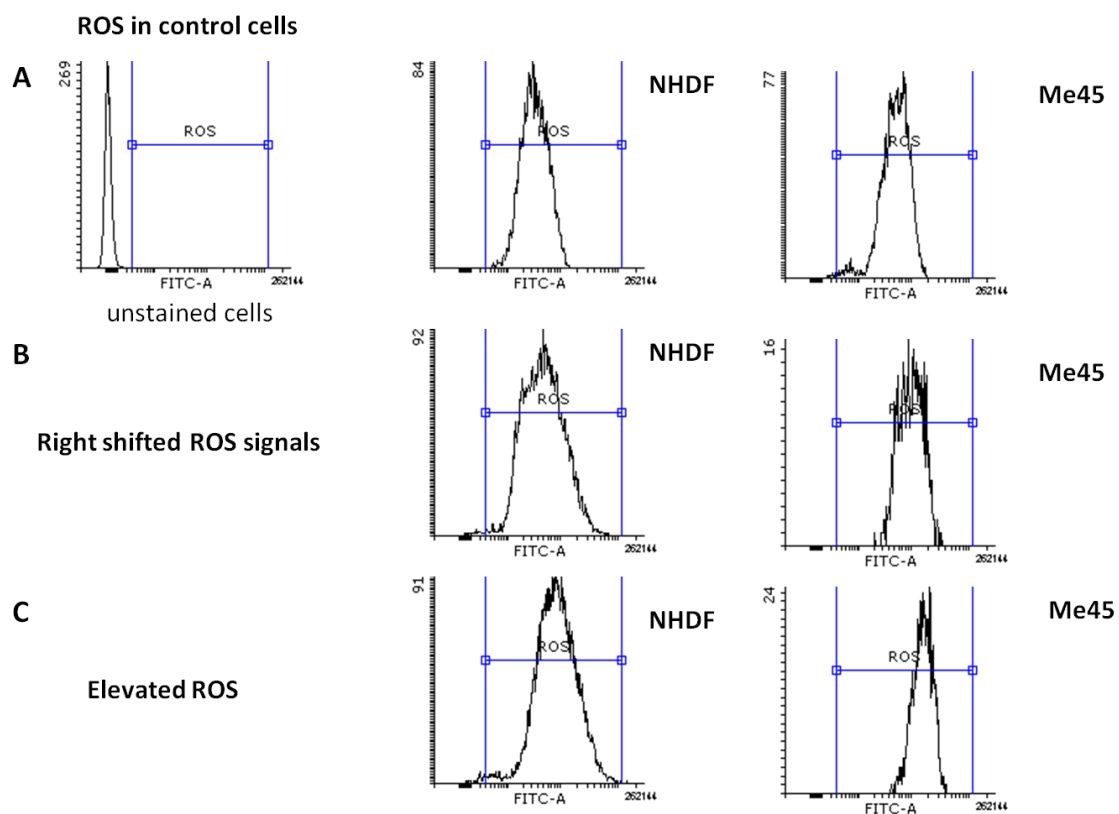


Figure S2. Representative ROS level histograms of control NHDF and Me45 cells (A); after compounds addition (B) and compounds with UV radiation (C).

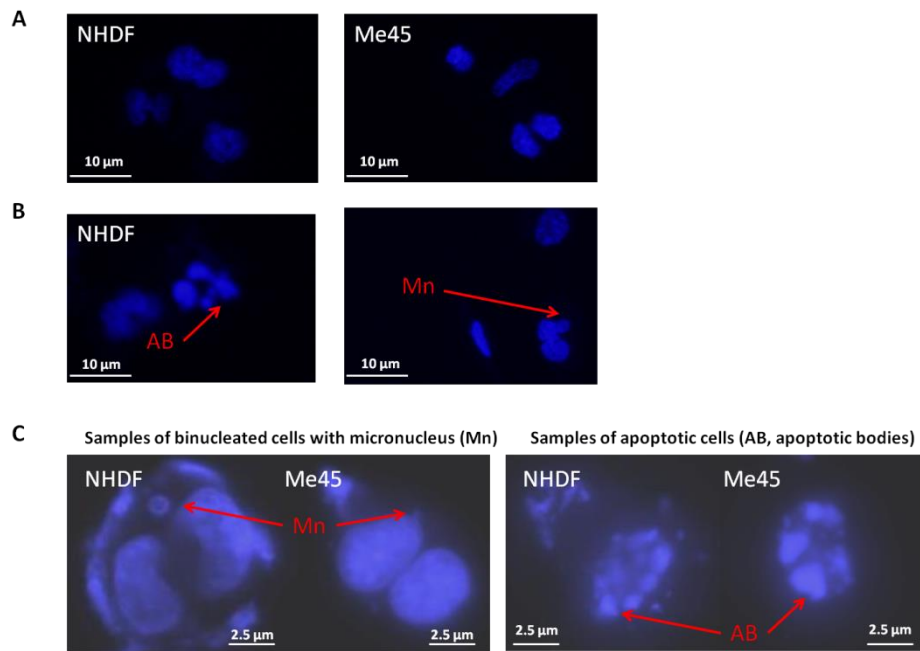


Figure S3. Representative images of nucleus of binucleated control NHDF and Me45 cells (A); after compounds addition (B) and compounds with UV radiation (C). Fluorescence microscopy images after DAPI staining; magnification 100x (A and B) or 400x (C).

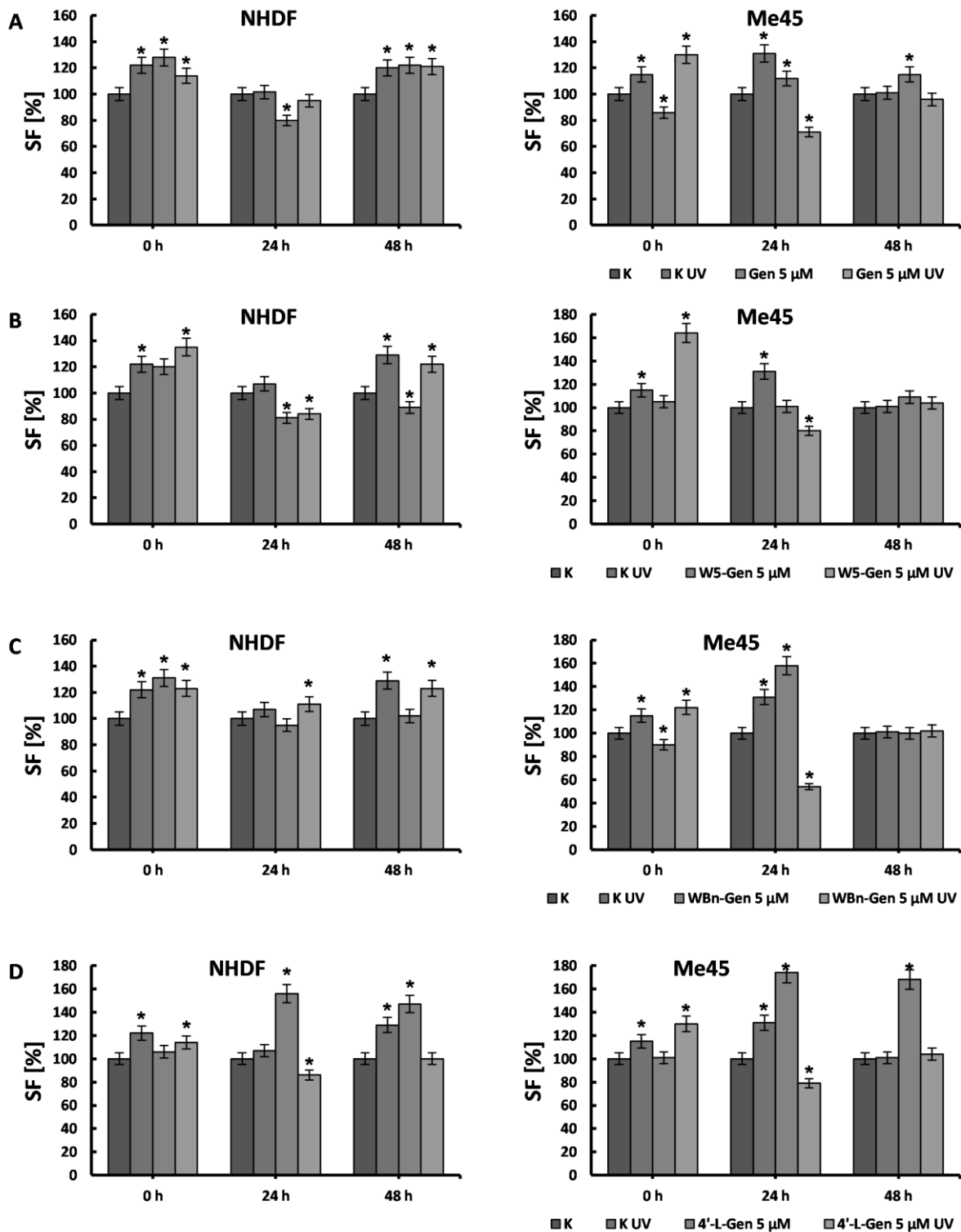


Figure S4. Viability of cells presented as Survival Fraction, SF [%], in comparison to the untreated controls. The results presented as mean from at least 3 experimental repeats, $\pm$ SD (5%).

Statistical significance was calculated from a *t*-test where $p < 0.05$ and indicated by an asterisk (*). Below in Tables are bolded.

Table S2. Statistics for Figure S4**A**

NHDF					Me45				
<u>k</u>	<u>k</u>	<u>k+UV</u>	<u>Gen</u>	<u>Gen+UV</u>	<u>k</u>	<u>k</u>	<u>k+UV</u>	<u>Gen</u>	<u>Gen+UV</u>
0h	0.5	0.00423	0.00198	0.01648	0h	0.5	0.01352	0.01063	0.00159
24h	0.5	0.08656	0.00283	0.13878	24h	0.5	0.00143	0.02521	0.00061
48h	0.5	0.00569	0.00423	0.00489	48h	0.5	0.40972	0.01352	0.18704

B

NHDF					Me45				
<u>k</u>	<u>k</u>	<u>k+UV</u>	<u>Gen</u>	<u>Gen+UV</u>	k	k	k+UV	W5-Gen	W5-Gen+UV
0h	0.5	0.00423	0.00569	0.00098	0h	0.5	0.01352	0.14913	0.00016
24h	0.5	0.08656	0.00345	0.00661	24h	0.5	0.00143	0.40972	0.00283
48h	0.5	0.00178	0.02328	0.00423	48h	0.5	0.40972	0.05138	0.19562

C

NHDF					Me45				
<u>k</u>	<u>k</u>	<u>k+UV</u>	<u>Gen</u>	<u>Gen+UV</u>	k	k	k+UV	W5-Gen	W5-Gen+UV
0h	0.5	0.00423	0.00143	0.003676841	0h	0.5	0.01352	0.03083	0.00423
24h	0.5	0.08656	0.13878	0.031635701	24h	0.5	0.00143	0.00021	7.51E-05
48h	0.5	0.00177	0.32651	0.003676841	48h	0.5	0.40972	0.5	0.32651

D

NHDF					Me45				
	<u>k</u>	<u>k+UV</u>	<u>Gen</u>	<u>Gen+UV</u>		k	k+UV	W5-Gen	W5-Gen+UV
0h	0.5	0.00423	0.11347	0.01648	0h	0.5	0.01352	0.40972	0.00159
24h	0.5	0.08656	0.00024	0.01063	24h	0.5	0.00143	0.00011	0.00233
48h	0.5	0.00177	0.00039	0.5	48h	0.5	0.40972	0.00014	0.19562