

Supplemental Information for:

Verteporfin-induced formation of protein cross-linked oligomers and high molecular weight complexes is mediated by light and leads to cell toxicity.

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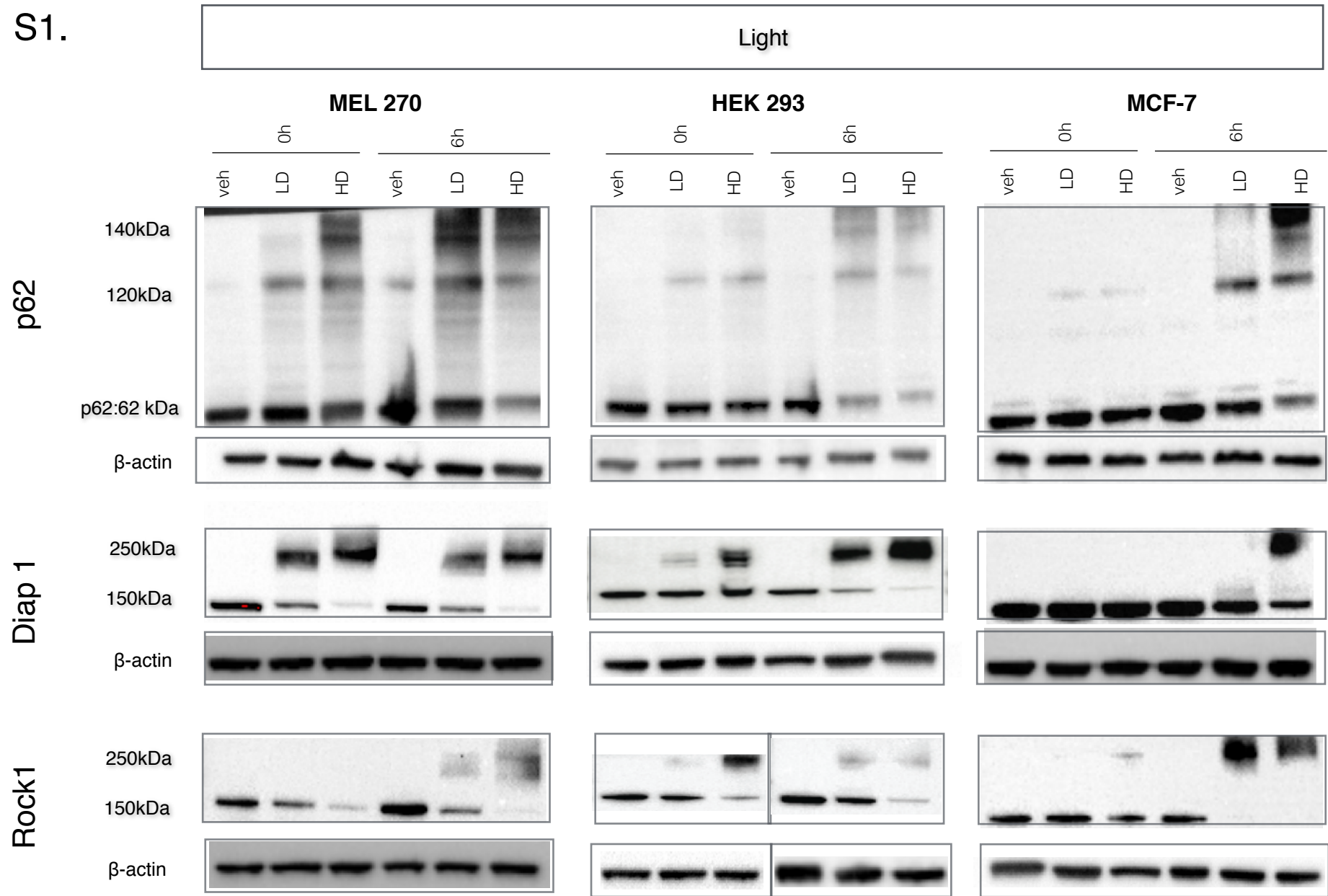
Supplementary Figure 1. Formation of p62, Diap1 and Rock1 oligomers in MEL 270, HEK 293 and MCF-7 cells when not shielded from light. Western-blot of protein extracts from cells treated with vehicle (veh.), low dose (LD, 1.25 µg/ml) and high dose (HD, 7.5 µg/ml) of Verteporfin (VP) for 0 and 6 hours in ambient light in all steps (treatment, lysis and electrophoresis).

Supplementary Figure 2. Light is needed for the formation of LC3 oligomers in MEL 270, HEK-293 and MCF-7 cell lines. Western-blot of protein extracts from cells treated with vehicle (veh.), low dose (LD, 1.25 µg/ml) or high dose (HD, 7.5 µg/ml) of Verteporfin (VP) for 0 and 6 hours. Right column demonstrates cells that kept in absolute darkness during all steps (treatment, lysis and electrophoresis). Left column demonstrates cells that were kept in darkness only for the duration of treatment with subsequent steps of cell lysis and electrophoresis in ambient light. In this series of western we notice that the expression of LC3 might change following a similar change, which can vary depending in the cell line. More pronounce HMWC formation is noticed in the HEK cells and MCF-7 in light comparing to the MEL270.

Supplementary Table 1. Table with abbreviations, explanations and p-values for Figure 8.

Multiple exposures of Figure 4 also provided.

S1.



S2.

LC3

MEL 270

LC3A/B:
14,16kDa

β -actin

HEK 293

LC3A/B:
14,16kDa

β -actin

MCF-7

LC3A/B:
14,16kDa

β -actin

Light

0h

6h

veh

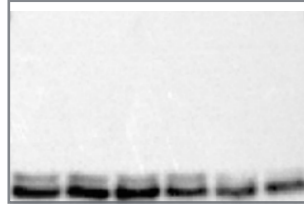
LD

HD

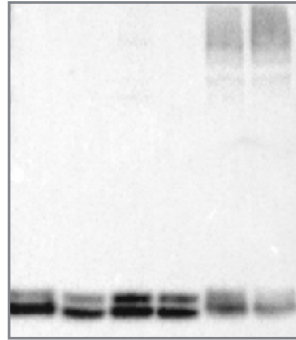
veh

LD

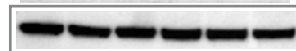
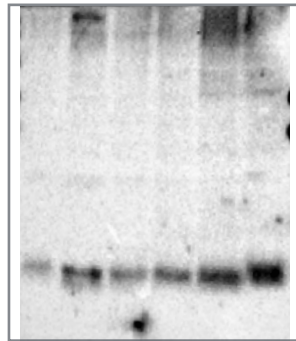
HD



140kDa
120kDa



140kDa
120kDa



Dark

0h

6h

veh

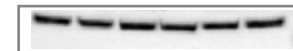
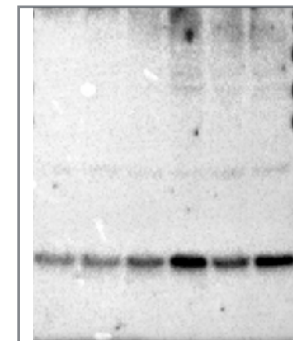
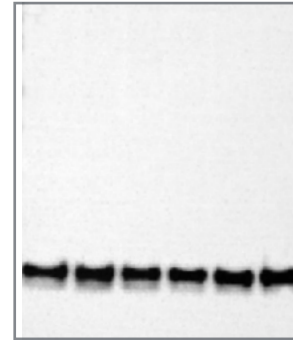
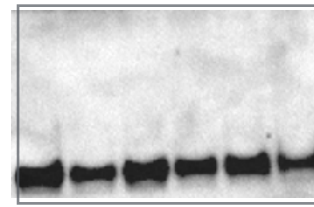
LD

HD

veh

LD

HD

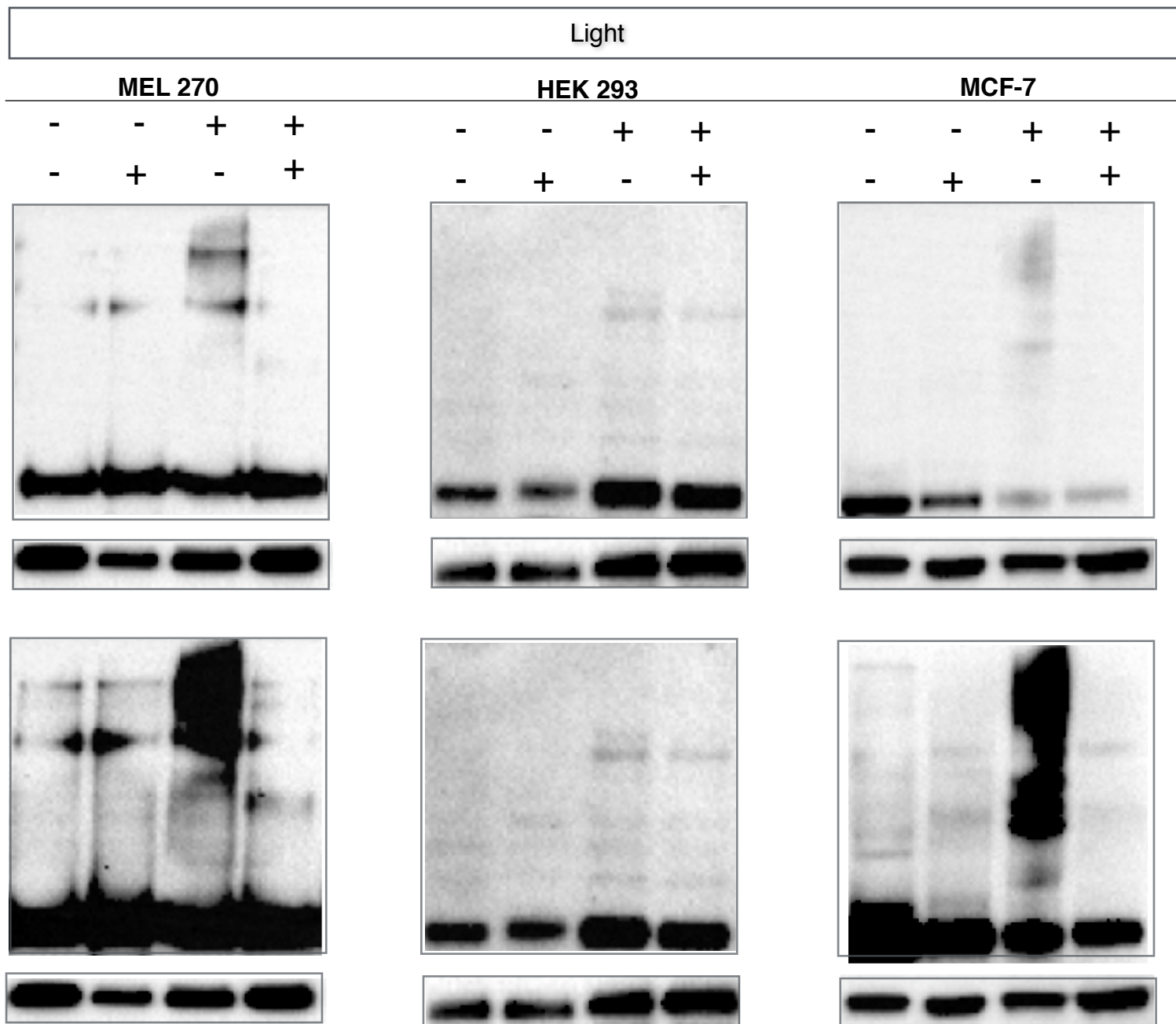


SupplementaryTable 1. Table with abbreviations, explanations and p-values for Figure 8.

Abbreviation	Explanation	Quantification
Control	No dose	0
LD	Low dose	1.25 µg /ml
HD	High dose	7.5 µg /ml
MEL 270 - p value	0h HD dark vs HD light	0.00433
MEL 270 - p value	6h HD dark vs HD light	5.08E-16
MEL 270 - p value	24h HD dark vs HD light	3.1723E-0.7
HEK 293 - p value	0h HD dark vs HD light	3.42E-05
HEK 293 - p value	6h LD dark vs LD light	0.00165971
HEK 293 - p value	6h HD dark vs HD light	0.00674024
HEK 293 - p value	24h HD dark vs HD light	6.11E-13
MCF-7 - p value	0h HD dark vs HD light	0.009
MCF-7 - p value	6h LD dark vs LD light	0.0187
MCF-7 - p value	6h HD dark vs HD light	0.000704
MCF-7 - p value	24h HD dark vs HD light	0.00108
ns	non statistically significant	>0.05

Fig. 4 (1/2) multiple exposures

6h



Lower exposure

Higher exposure

Fig. 4 (2/2) multiple exposures

