

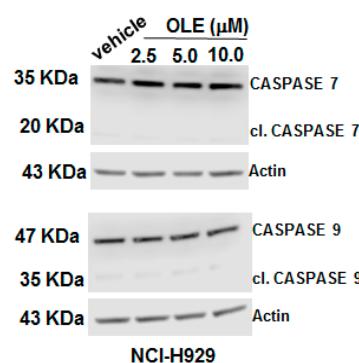
# Supplementary Materials: Anti-tumor Activity and Epigenetic Impact of the Polyphenol Oleacein in Multiple Myeloma

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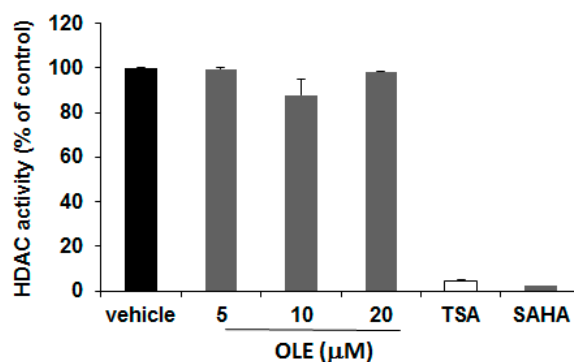
**Table S1.** Characteristics of MM cell lines.

MM Cell Line	Cytogenetic	TP53 Status*
AMO-1	t(12;14)	WT
AMO-bzb	t(12;14)	WT
OPM2	t(4;14)	HD
MM1s	t(14;16)	WT
NCI-H929	t(4;14)	WT
RPMI-8226	t(14;16)	HD
JJN3	t(14;16)	HD
U266	t(11;14)	HD

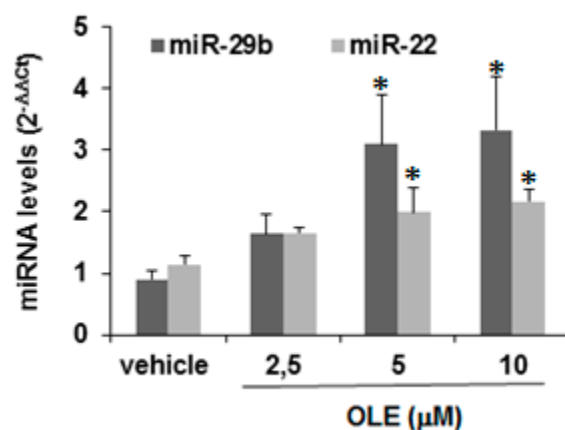
\*WT indicates wild type; HD indicates homozygous mutation or homozygous deletion; MM indicates multiple myeloma.



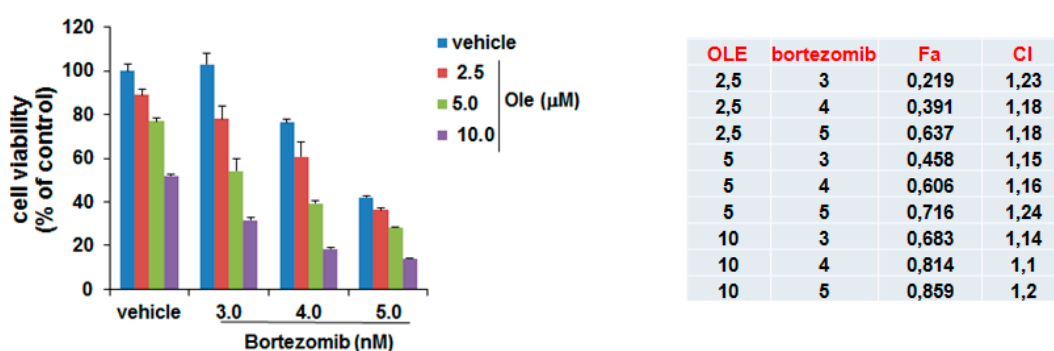
**Figure S1.** Western Blot (WB) of pro-caspase 7, cleaved caspase 7, pro-caspase 9 and cleaved caspase 9 in NCI-H929 cells after 24 hours of oleacein treatment.



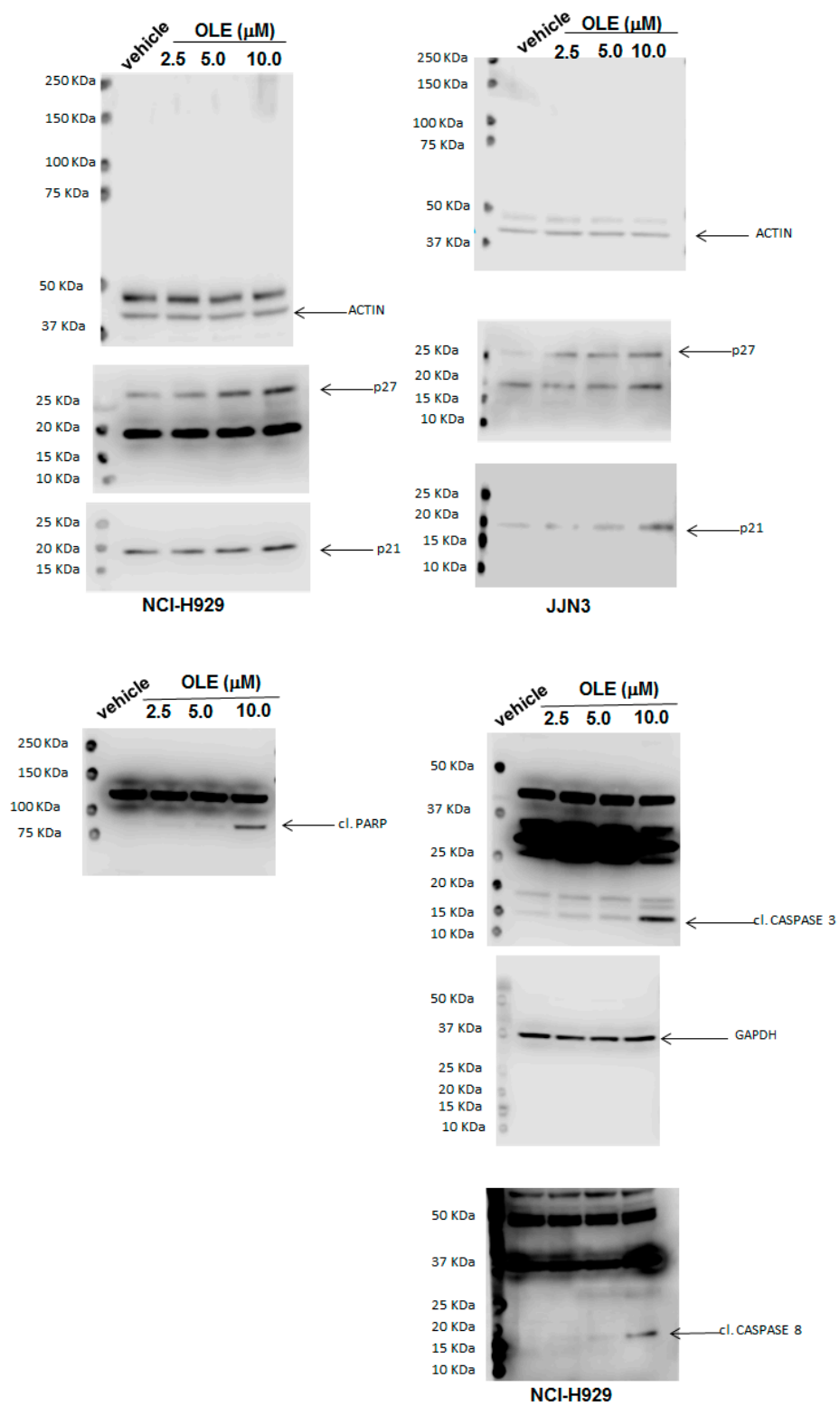
**Figure S2.** Histone deacetylase (HDAC) activity was determined in JJN3 cells treated with oleacein, as reported in materials and methods; Trichostatin A (TSA) was used as positive control. Results are expressed as % of HDAC activity as compared to DMSO-treated cells. \*  $p < 0.05$  as compared to vehicle.



**Figure S3.** miR-29b and miR-22 expression levels were determined by qRT-PCR in JJN3 cells treated for 24 hours with oleacein; miRNA expression was normalized on RNU44. \*  $p < 0.05$  as compared to vehicle.



**Figure S4.** Cell Titer Glo (CTG) assay was performed on NCI-H929 cells treated with oleacein (2.5, 5.0 or 10.0 µM) and bortezomib (1.0, 2.0 and 5.0 nM). Results are expressed as the percentage of the viability of vehicle-treated cells. The right panel reports values of fraction affected (Fa) and combination indexes (CI) for each drug combination, as calculated by the Calcsyn software, in a triplicate experiment.



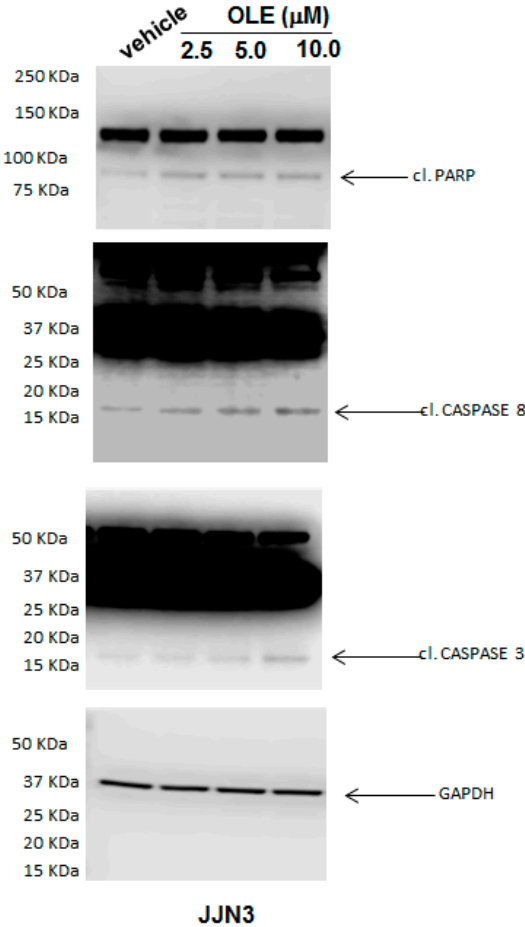
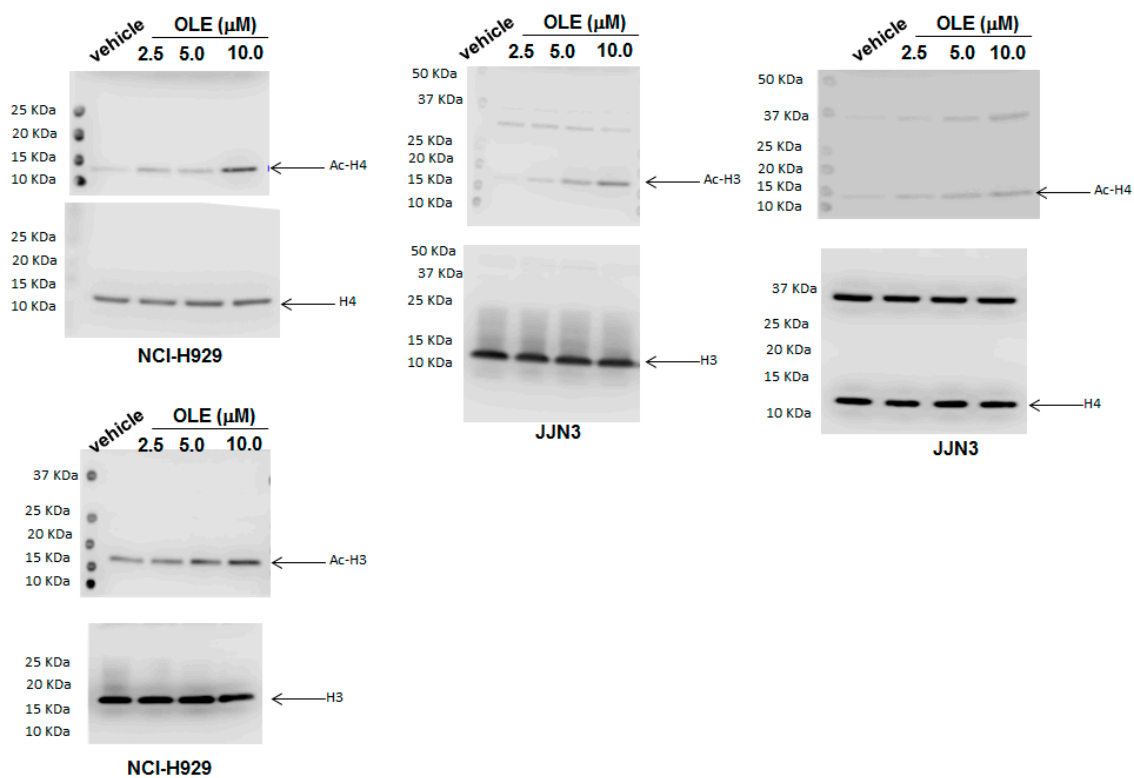
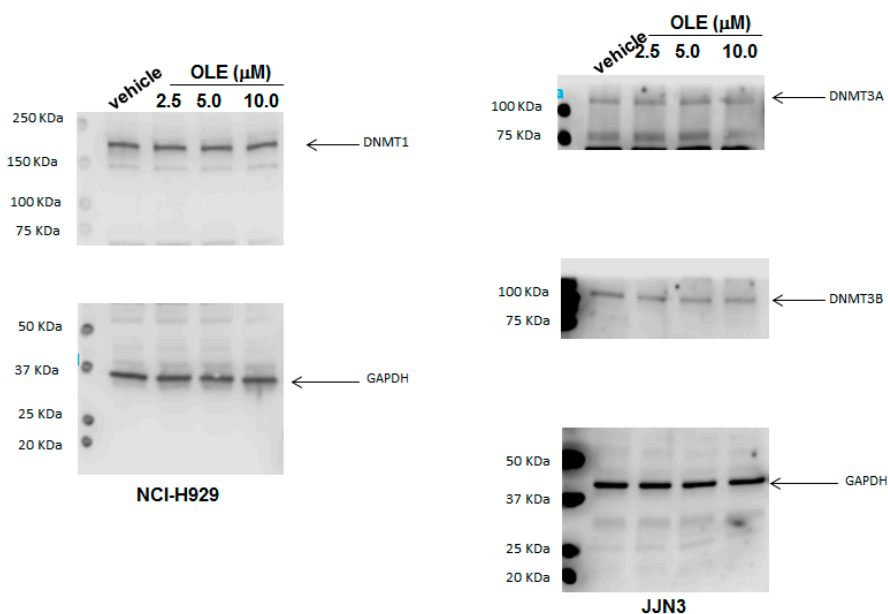


Figure S5. Whole blots for Figure 2.



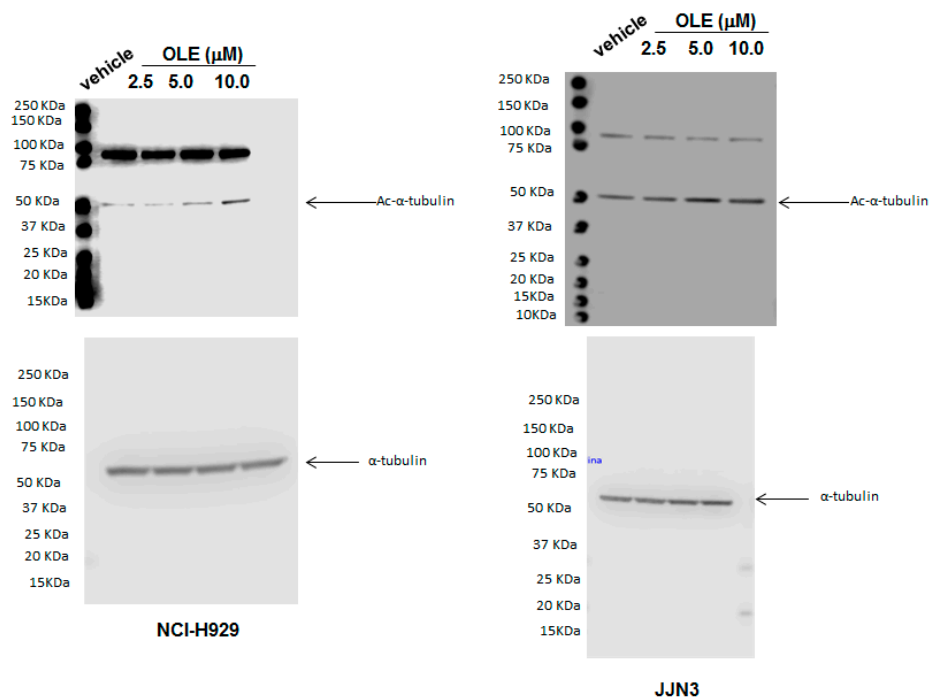
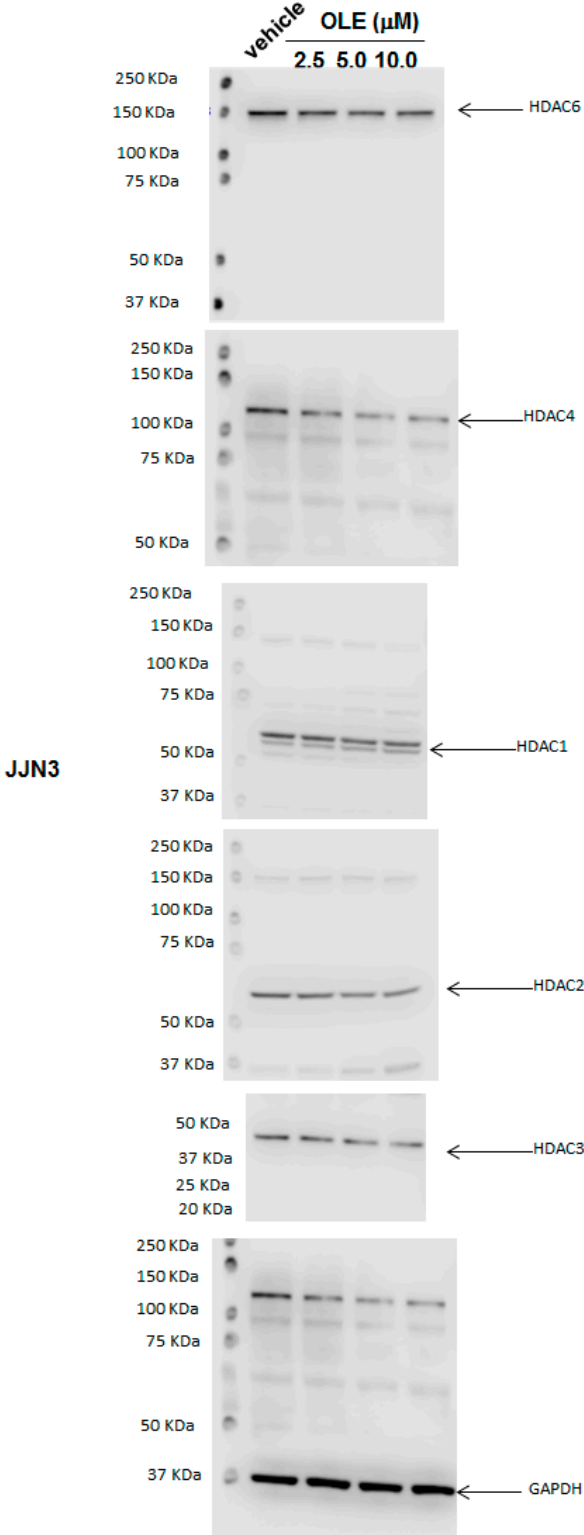
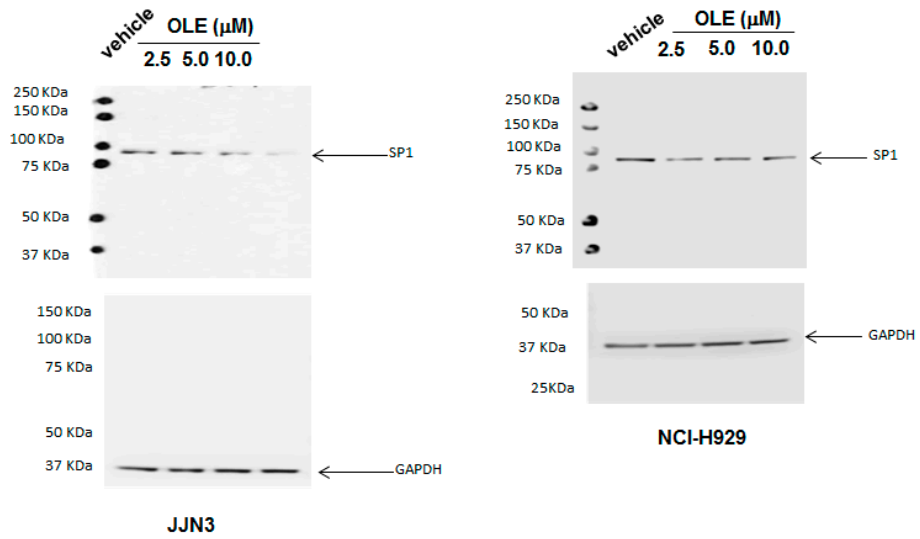
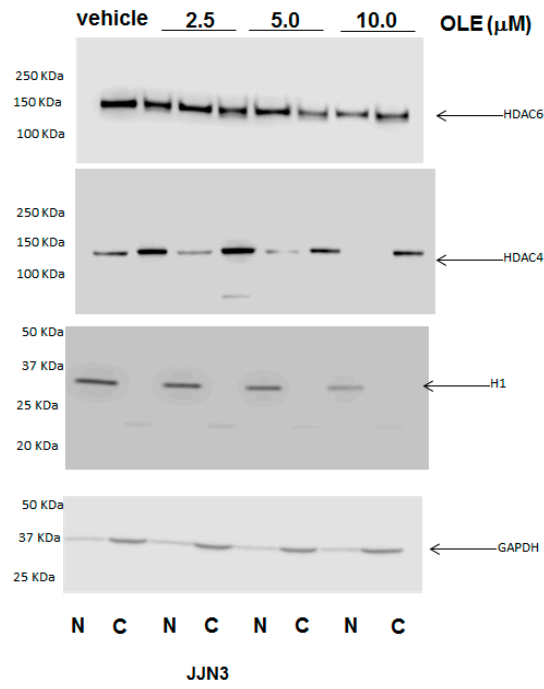


Figure S6. Whole blots for Figure 3.







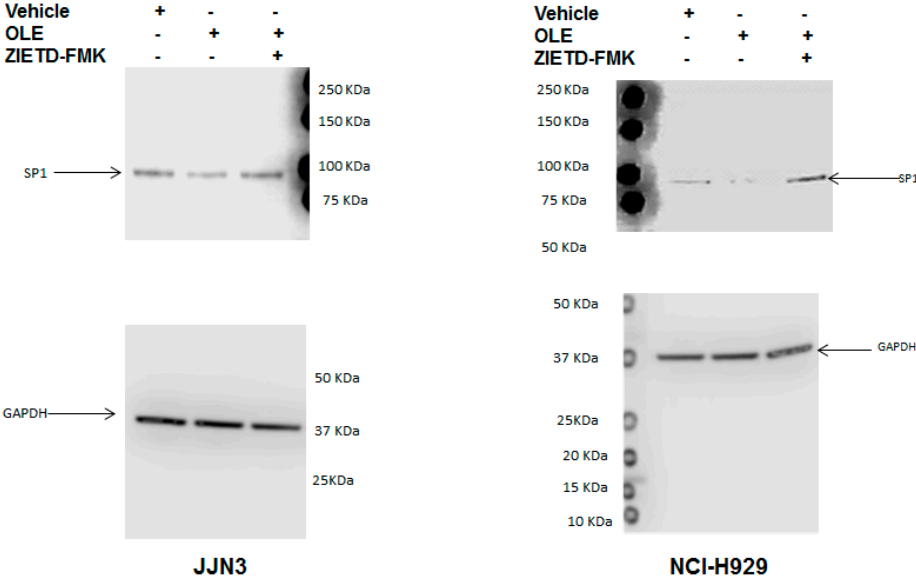


Figure S7. Whole blots for Figure 4.

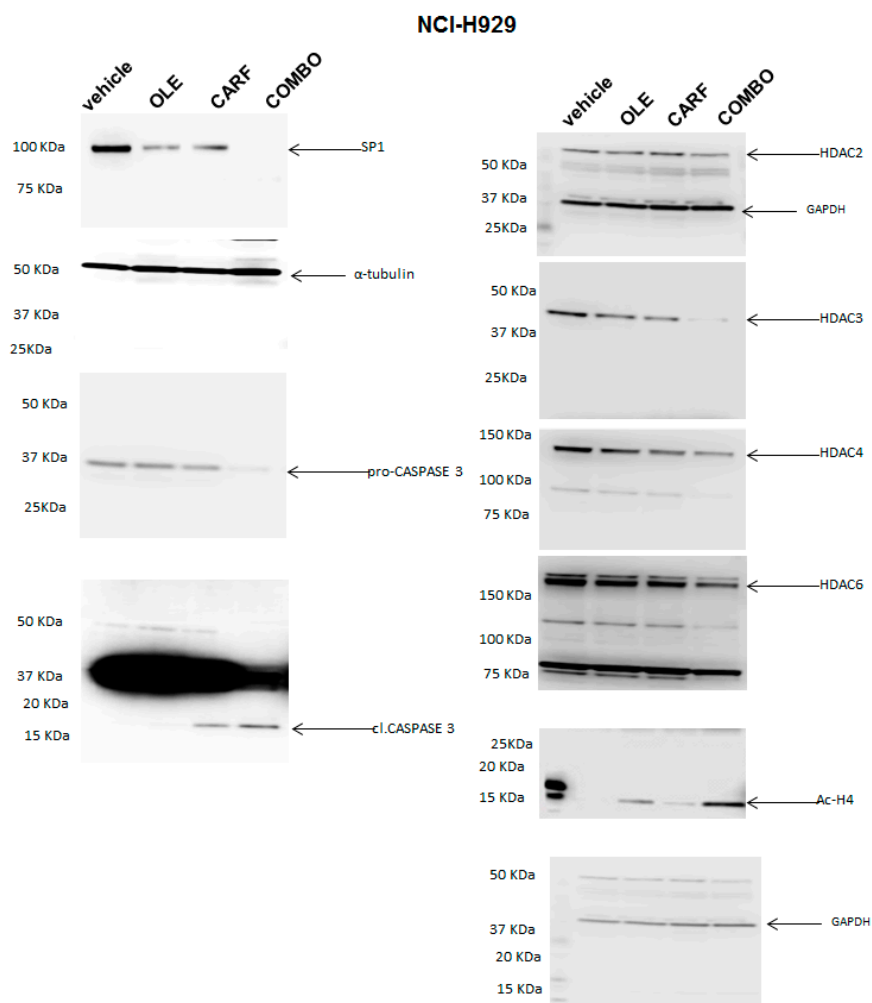


Figure S8. Whole blots for Figure 5.

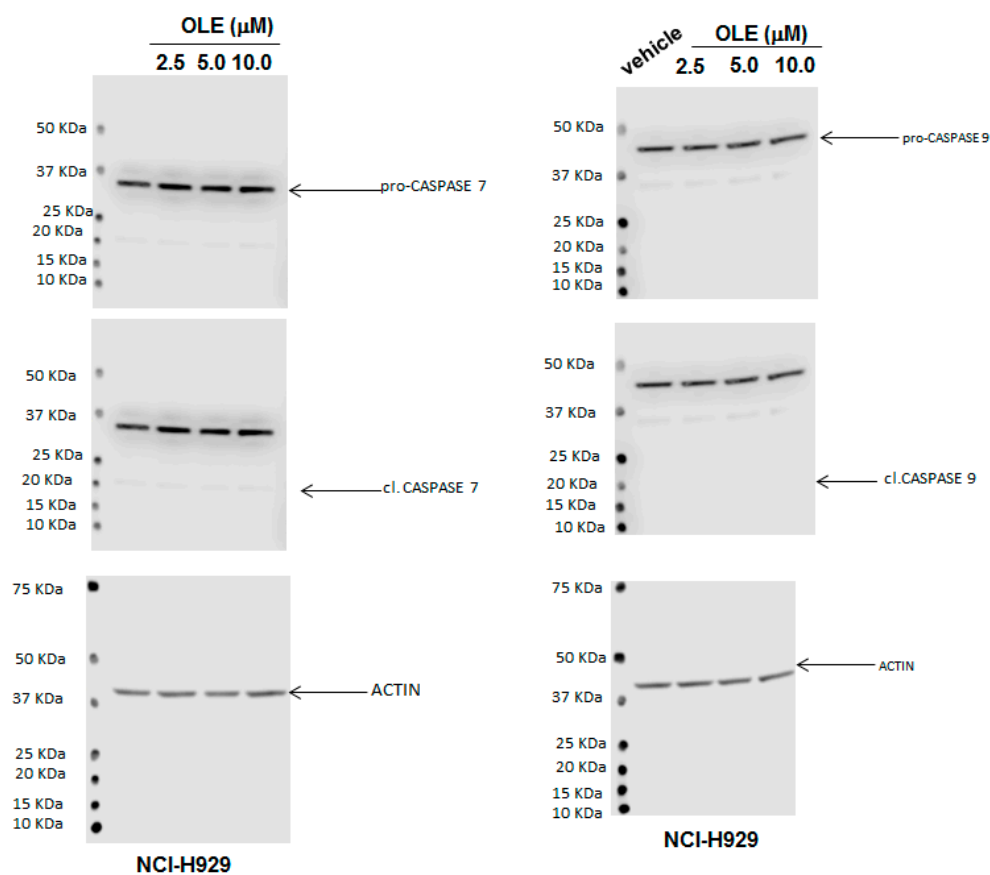


Figure S9. Whole blots for Figure S1.



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