

OMTO, Volume 19

Supplemental Information

**Valeric Acid Suppresses Liver Cancer Development
by Acting as a Novel HDAC Inhibitor**

Rui Han, Olivia Nusbaum, Xinyi Chen, and Yong Zhu

Supplementary Information

Table S1. Oligo primer sequences of genes in this study

Gene	Primer	Base sequence
E2F3	Forward	5'-AAG AAA TTA GAT GAA CTG ATC CAA AGC-3'
	Reverse	5'-TAA CAT AAG CTA ACC TTT GAT TCT CTG AA-3
E2F1	Forward	5'-CAT CCA GGA AAA GGT GTG AAA TC-3'
	Reverse	5'-AGG ACG TTG GTG ATG TCA TAG ATG-3'
Bax	Forward	5'-CAG GGT TTC ATC CAG GAT CGA GCA G-3'
	Reverse	5'-GGC GGT GAG GAC TCC AGC CAC AAA G-3'
Bcl2	Forward	5'-ATG TGT GTG GAG AGC GTC AAC C-3'
	Reverse	5'-GCA TCC CAG CCT CCG TTA TC-3'
Bcl2L1	Forward	5'-GCT GGT GGT TGA CTT TCT CTC C-3'
	Reverse	5'-GGC TTC AGT CCT GTT CTC TTC G-3'

Fig. S1. VA has various degrees of cell proliferation suppression effect on 14 different types of cell lines. Relative inhibition rates of each cell line (A-N) in response to different concentrations of VA, were calculated by comparing the OD value of different concentrations of VA to each NC group, at 24, 48, 72 and 96 hrs, respectively.

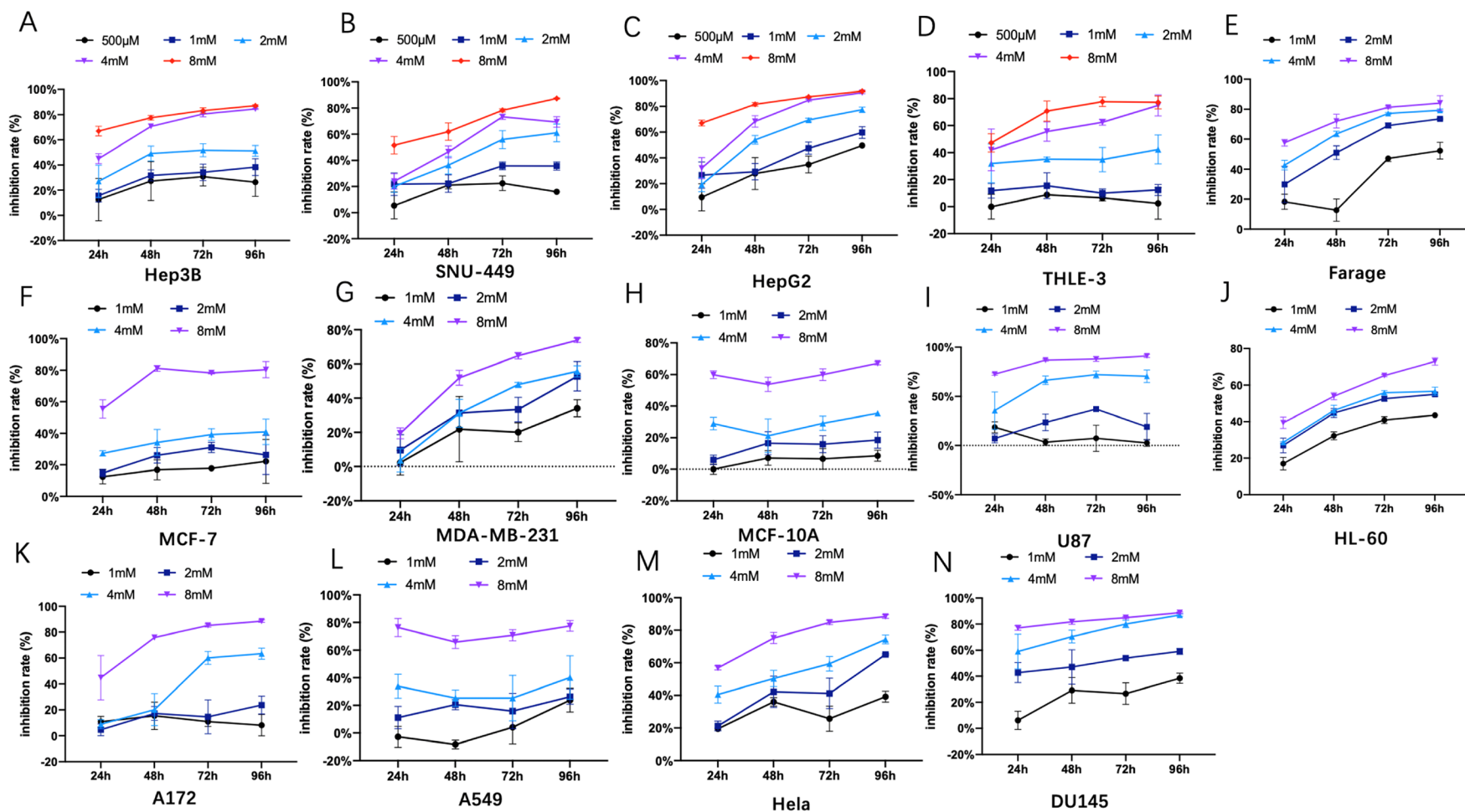


Fig. S2 Lipid based nanoparticle (LNP) or Lipid based nanoparticle encapsulated VA (LV) with different concentrations had different degrees of cell proliferation suppression effect on 14 cell lines. Relative inhibition rates of 14 cell lines (A-N) in response to different concentrations of LNP or LV were calculated by comparing the OD value of LNP or LV to each NC, at 24, 48, 72, and 96 h, respectively. Data are presented as the mean \pm standard deviation (SD); NS, not significant; NC, negative control.

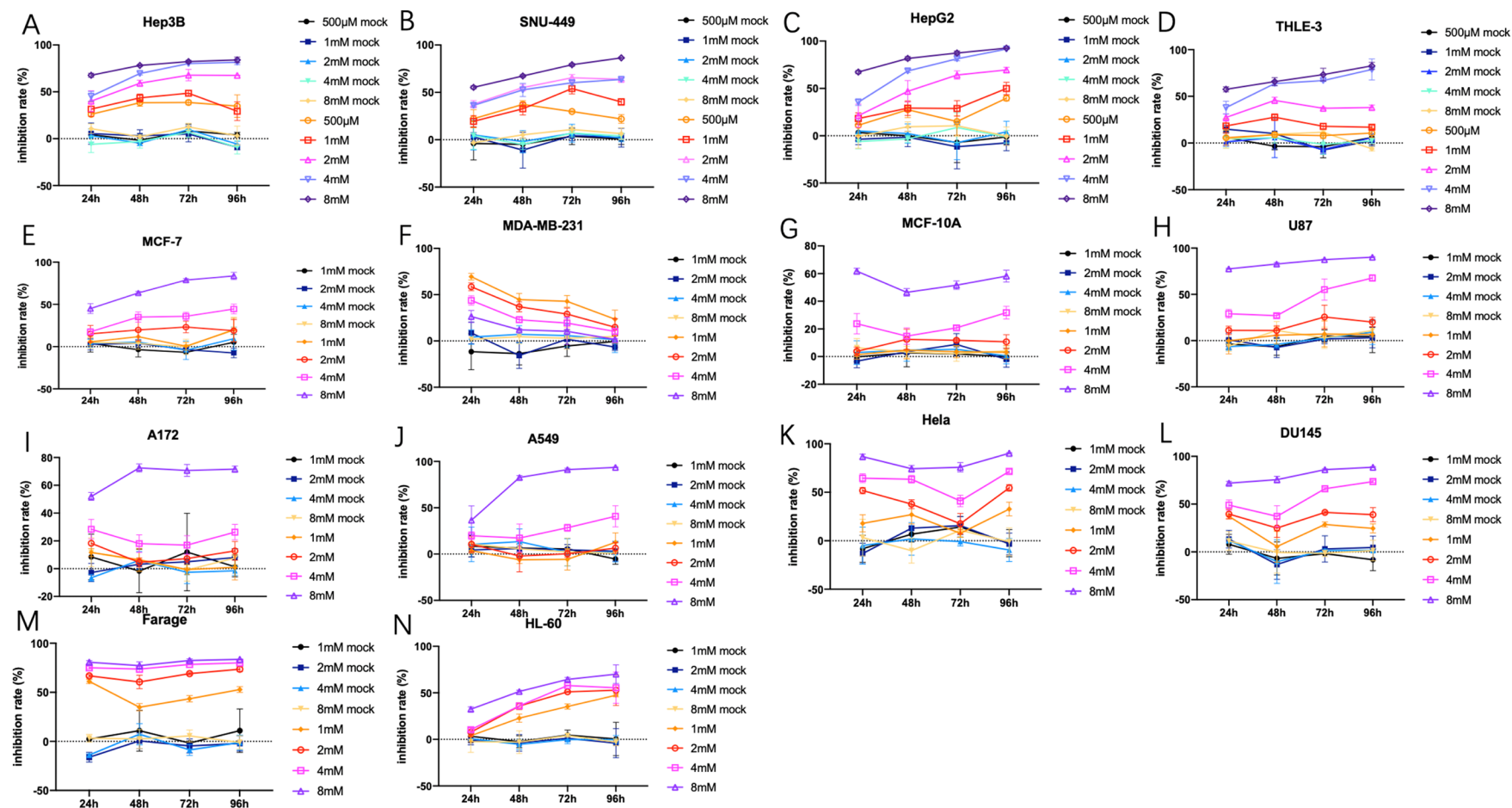


Fig. S3 Mouse HCC cells implantation. All 16 male athymic nude mice were injected with Hep3B-Luc or SNU-449-Luc cells respectively. The injection point was 2mm below the angle which formed by the xiphoid and the left costal margin of the mouse.

