

Figure S2

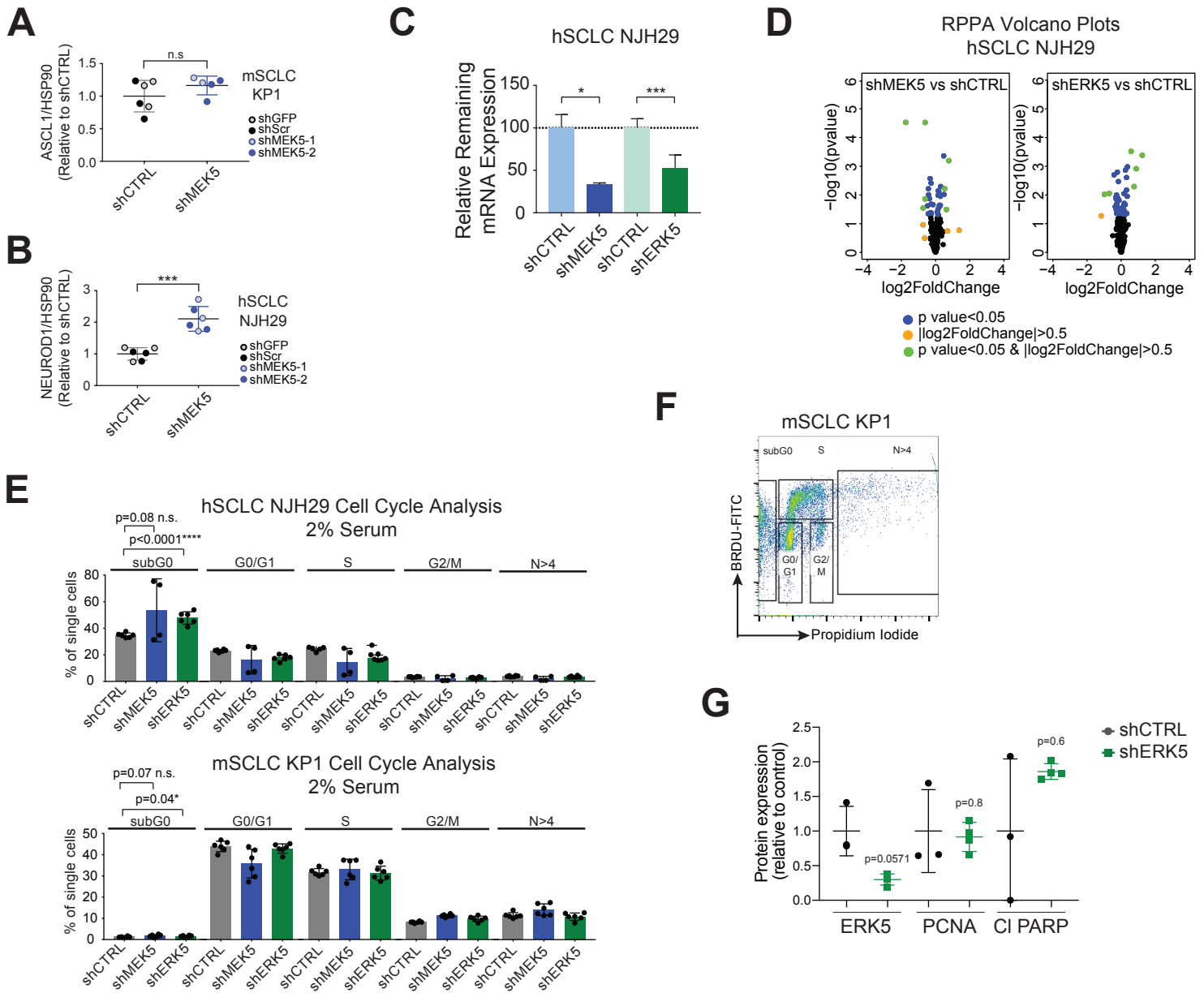


Figure S2: MEK5 and ERK5 knock-down induces cell death in SCLC cells

(A-B) NEUROD1 protein levels assayed by Simple WesternTM immunoassay in hSCLC NJH29 cells (A) and ASCL1 protein levels in mSCLC KP1 cells (B) relative to loading control HSP90 protein levels, in shCTRL or shMEK5 conditions; grey or colored dots represent two independent shRNAs per group; n=2-3 replicates per hairpin, n.s., p>0.05, ***, p<0.001 (t-test).

(C) Relative remaining mRNA levels of MEK5 and ERK5 after knockdown and before subsection to RPPA analysis are shown for Figure 2A; mRNA levels for each gene are normalized to the average expression level of that gene in the shCTRLs (shGFP and shSCR samples), with two individual shRNAs per group and n=3 replicates per individual hairpin; * signifies p<0.05 and ***, p<0.001 (t-test).

(D) Volcano plots of RPPA results for experiment in Figure 2A, for shMEK5 and shERK5 separately; blue dots specify significant proteins (p value<0.05), orange dots specify proteins with absolute value of log2 fold change is greater than 0.5, while green dots specify proteins fitting both of these criteria.

(E) Cell cycle structure of hSCLC NJH29 (top) and mSCLC KP1 (bottom) cells with MEK5 or ERK5 knockdown shown by BrdU/PI staining and FACS analysis; cells were grown in media with 2% serum, with * signifying p<0.05, ****, p<0.0001, and n.s. signifying p>0.05; all comparisons not marked with a p value have a p>0.05 (t-test); n= 2-3 independent experiments per hairpin with 2 shRNAs per group.

(F) An example of a FACS plot for (E) shown for KP1 cells (top right).

(G) Quantification of Figure 2E (t-test).