

21-MT1 scramble

21-MT1 siD6

21-MT1 siQ6

◆ 21-MT1 siQ4

Supplemental Figure 1A. Knockdown of top 20 differentially expressed genes between lapatinib resistant and sensitive HER2+ cell lines in the sensitive cell line SKBR3. Knockdown of APOBEC3 and IGFBP6 inhibit growth, but knockdown of INHBA has no appreciable effect on the growth of these cells. **1B.** Use of three different siRNA's targeting INHBA in 21MT1 cells show significant impairment of growth following knockdown compared to scramble control. Error bars are +/- standard deviation.





Supplemental Figure 2. A. Expression of INHBA and related family members in a panel of breast cancer cell lines. Note the expression of INHBA and INHBB are largely inversely correlated. **B.** RNAseq read counts as a measure of expression of INHBA in HER2+ breast cancer cells treated with INHBA siRNA (Q6) or control (sc) siRNA. INHBA siRNA treated cells show INHBA expression levels less than half of the scramble treated control cells. Note 21-MT1, JIMT1, and HCC1954 are all basal subtype cells, while SKBR3 is a luminal subtype cell. SKBR3 expression was too low to be seen on the graph. Read count values are displayed for all cells above the bars.



Supplemental Figure 3A. Boxplots showing INHBA expression in different subtypes of breast cancer from the GOBO database. Values above represent number of samples within each class.B. Expression of INHBA and outcome in patients with luminal A and luminal B subtype breast cancer.