



Figure S5

**Figure S5 . Proteasome inhibition affects accessibility of super enhancers important in breast cancer biology.**

**A)** Identification of super enhancers from control and MG132 treated MCF-7 cells. Enhancer regions are plotted in an increasing order based on normalized H3K27ac signal. Super-enhancers are defined as the population of enhancers above the inflection point of the curve. Examples of closest TSS to 3 top SEs in each class are shown **B)** Graph showing the level of H3K27ac signal observed at shared and unique super enhancers that overlap or do not overlap with DOCRs. **C)** Browser tracks showing examples of SEs 1) BCAS3 intron unique to control and overlaps with LOST DOCR; 2) Chr20 desert unique to MG24H, overlaps with GAIN; 3) SEMA4C/FAM178B unique to control and LINCO1754 unique to MG24H do not overlap with DOCRs. Tracks show read coverage of chromatin accessibility (ATAC), differential ATAC (DIFF), H3K27ac, and SE region. SE chromosome start coordinates are shown on top. Tracks: Control (0), MG24H (24H). **D)** SE show individual tumor heterogeneity in DNA accessibility. Browser tracks of VMP1/MIR21 (Chr 17), SUMO1P1 (Chr 20) and PVT1 (Chr 8), SE regions are representative examples, cluster A, B and D. Tracks show read coverage of chromatin accessibility (ATAC), differential ATAC (DIFF), H3K27ac, SE, normalized ATAC signal for individual tumors showing High or Low proliferation, average normalized ATAC signal for non-basal (brown) and basal (green) breast tumors. Tracks: Control (0), MG24H (24H). **E)** Browser tracks of C1orf143 (LINC02869, Chr1), ZMYND8 (Chr 20), GSE1 (Chr 16), SE regions are representative examples, cluster C, E and F.