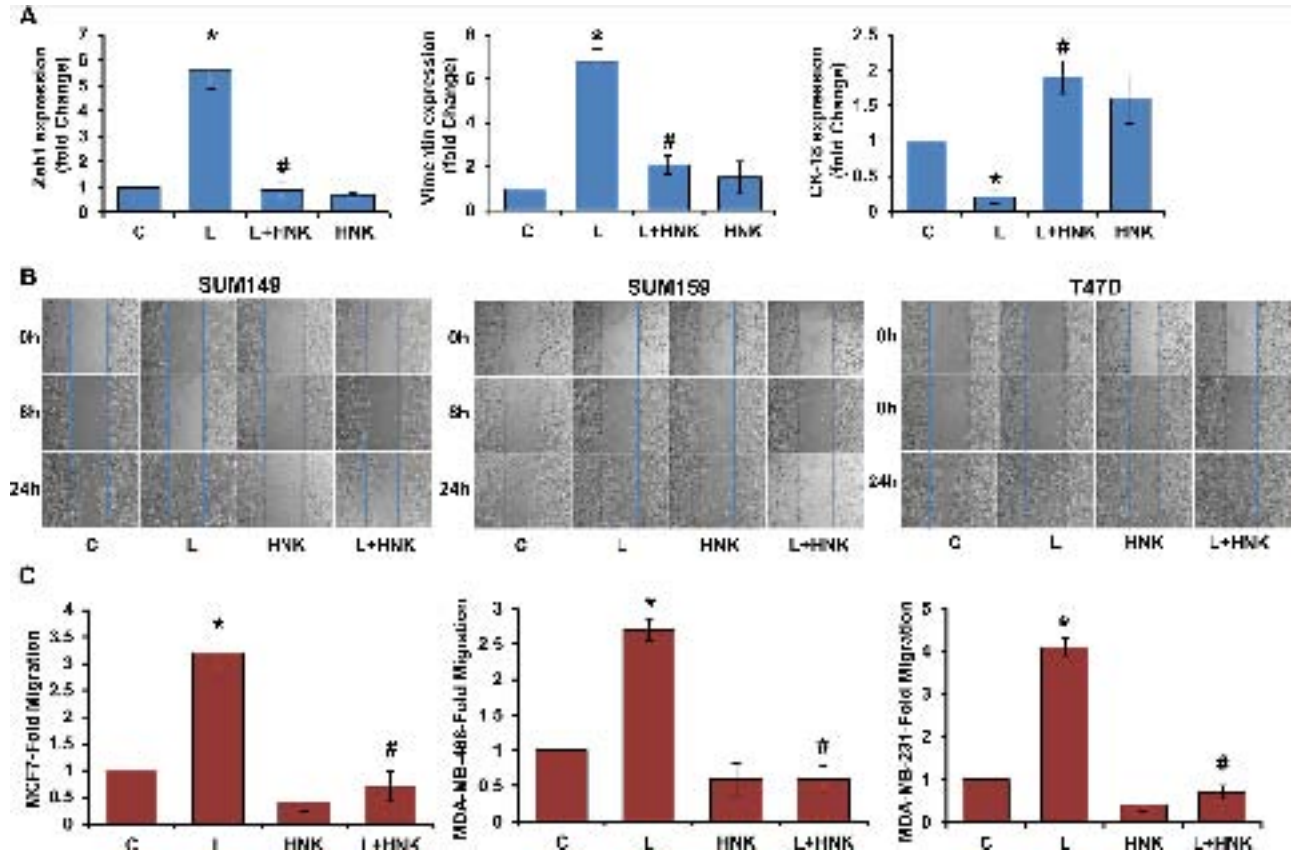
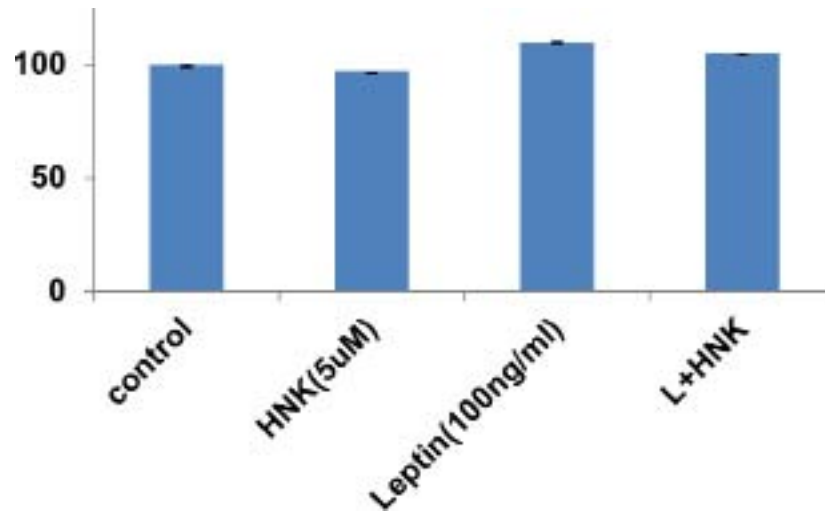


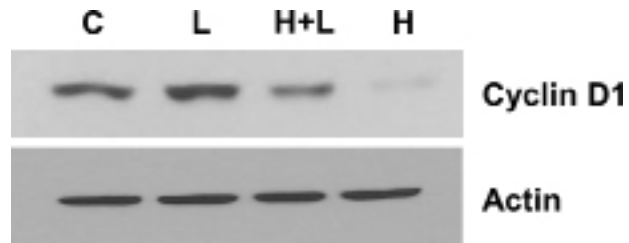
SUPPLEMENTARY FIGURES



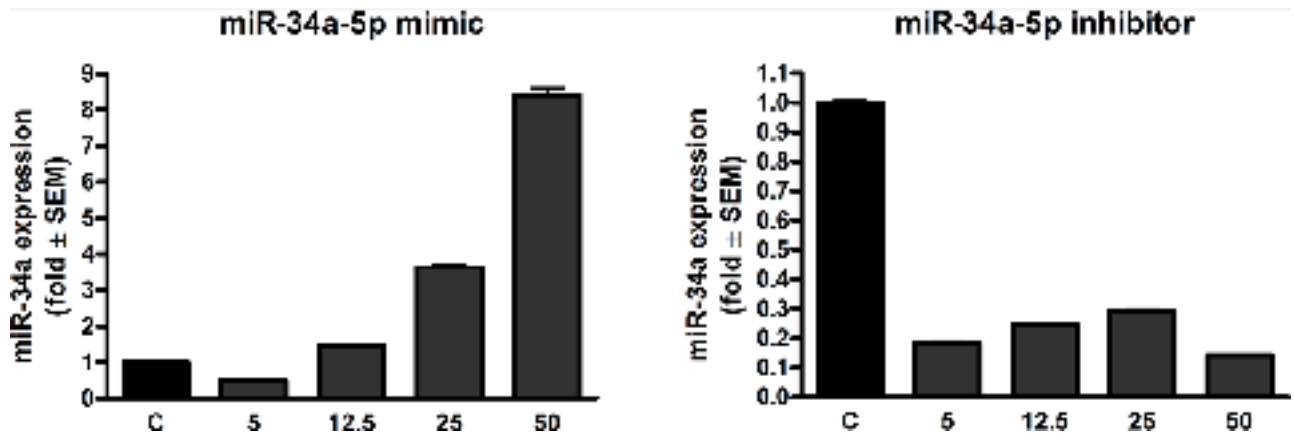
Supplementary Figure S1: Honokiol modulates the expression of epithelial and mesenchymal marker genes and inhibits leptin-induced migration of breast cancer cells. **A.** MCF7 cells were treated with leptin (L) (100 ng/ml) and/or Honokiol (HNK) (5 μ M) as indicated, total RNA was isolated and expression levels of Zeb1, vimentin and CK-18 were analyzed. Actin was used as control. Bar graphs represent the fold-change in the expression of Zeb1, vimentin and CK-18. * $p < 0.001$, compared with untreated controls. # $p < 0.001$, compared with leptin-alone treatment. **B.** SUM149, SUM159 and T47D cells were treated with leptin (L, 100 ng/ml) and/or honokiol (HNK, 5 μ M) alone and in combination as indicated and subjected to scratch-migration assay. **C.** MCF7, MDA-MB-468 and MDA-MB-231 cells were treated with leptin (L, 100 ng/ml) and/or honokiol (HNK, 5 μ M) alone and in combination as indicated and subjected to scratch-migration assay. Bar graphs show the fold-change in migration of breast cancer cells. * $p < 0.001$, compared with untreated controls. # $p < 0.01$, compared with leptin-alone treatment.



Supplementary Figure S2: Honokiol does not alter growth of MCF10A cells. MCF10A cells were treated with leptin (L) (100 ng/ml) and/or honokiol (HNK) (5 µM) as indicated and subjected to SRB growth assay.



Supplementary Figure S3: Honokiol decreases the expression of leptin-induced cyclin D1. MCF7 cells were treated with leptin (L) (100 ng/ml) and/or honokiol (HNK) (5 μ M) as indicated, total protein was isolated followed by immunoblot analysis for cyclin D1 expression.



Supplementary Figure S4: miR-34a mimic and miR-34a inhibitor. MCF7 cells were transfected with miR-34a inhibitor or miR-34a mimic as indicated. The miR-34a levels were measured.