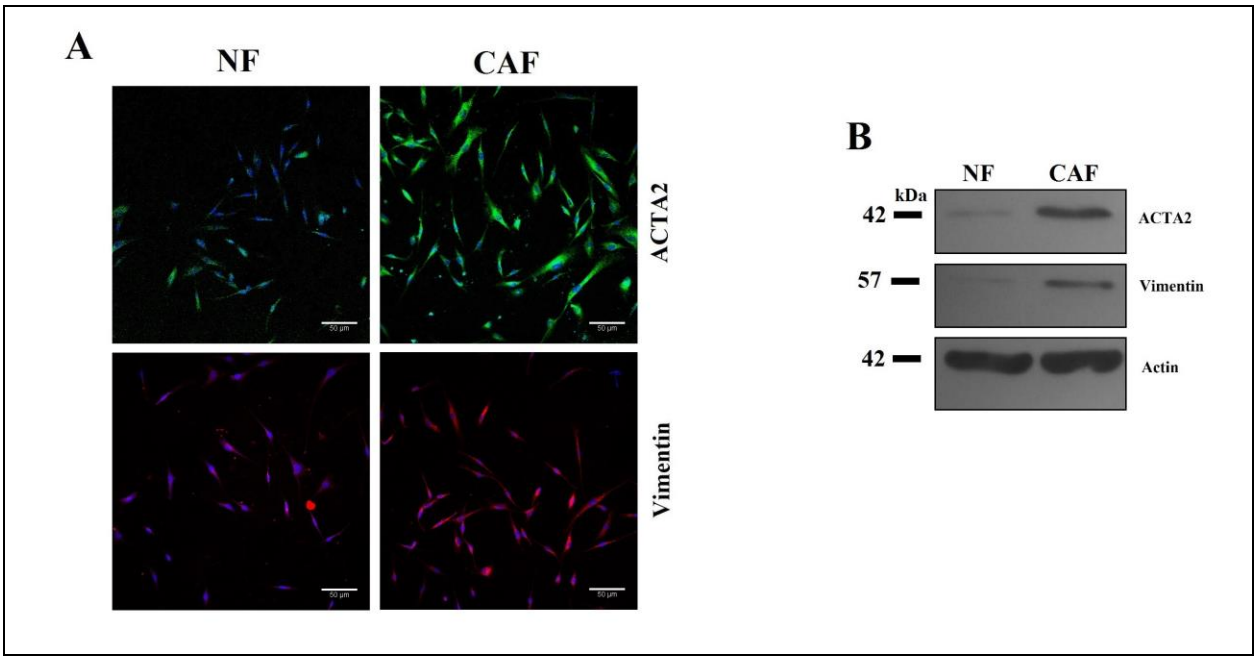
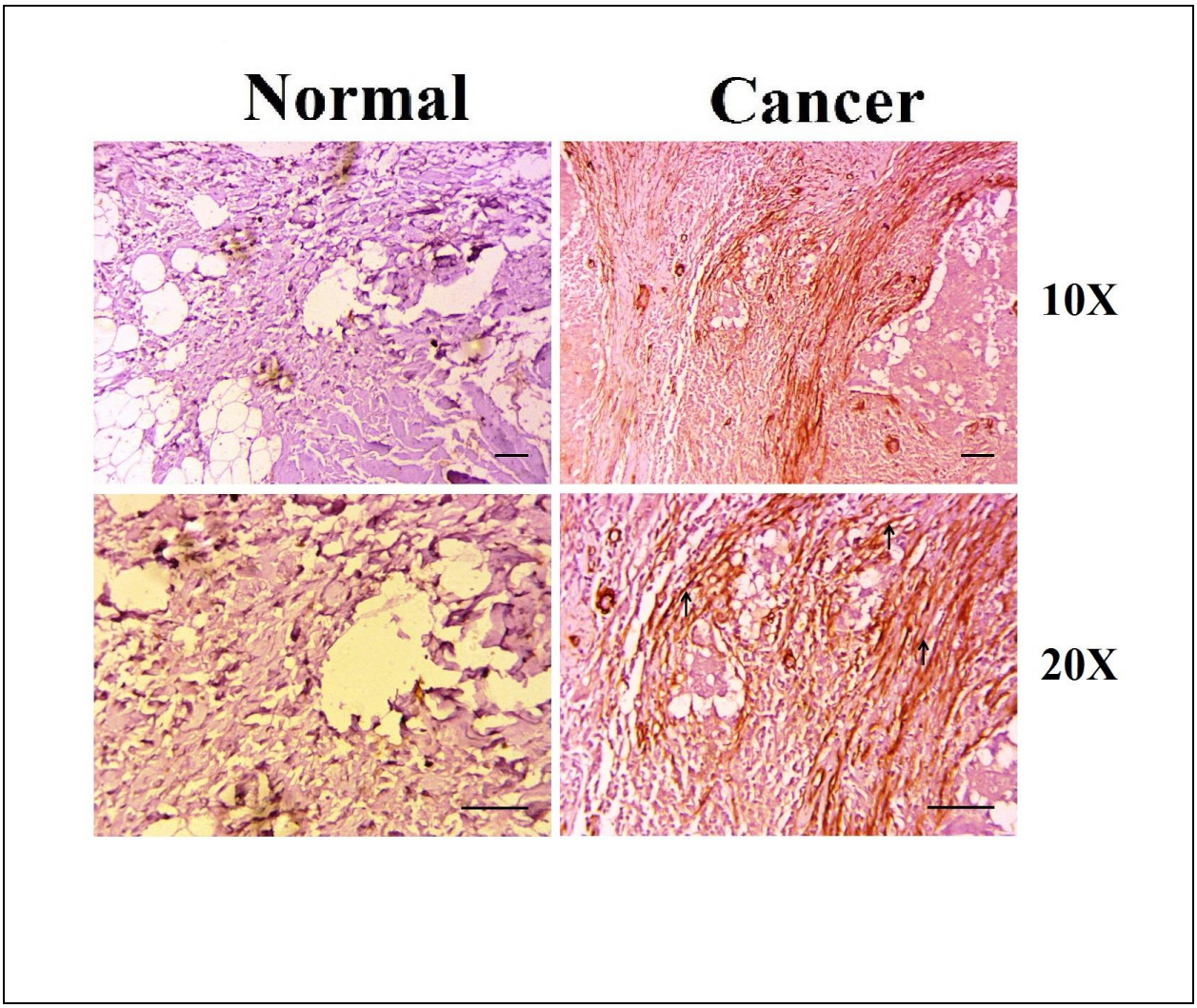
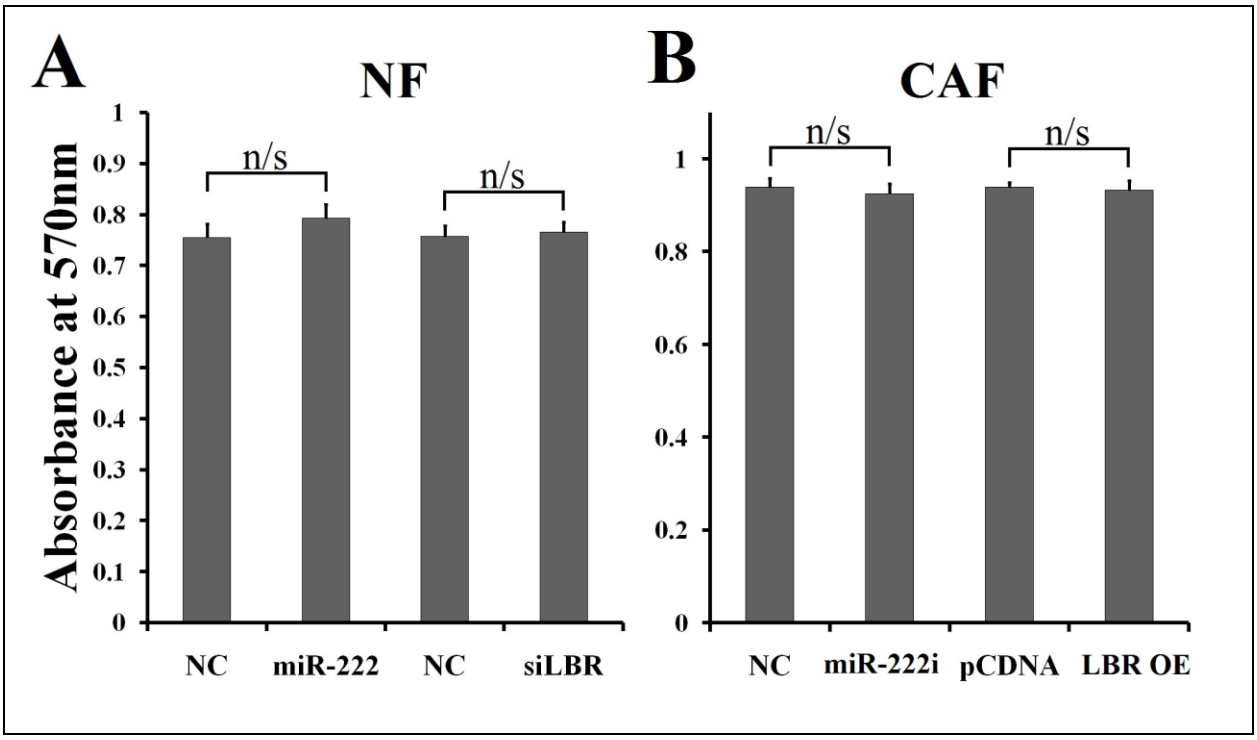
**SUPPLEMENTARY FIGURES:**



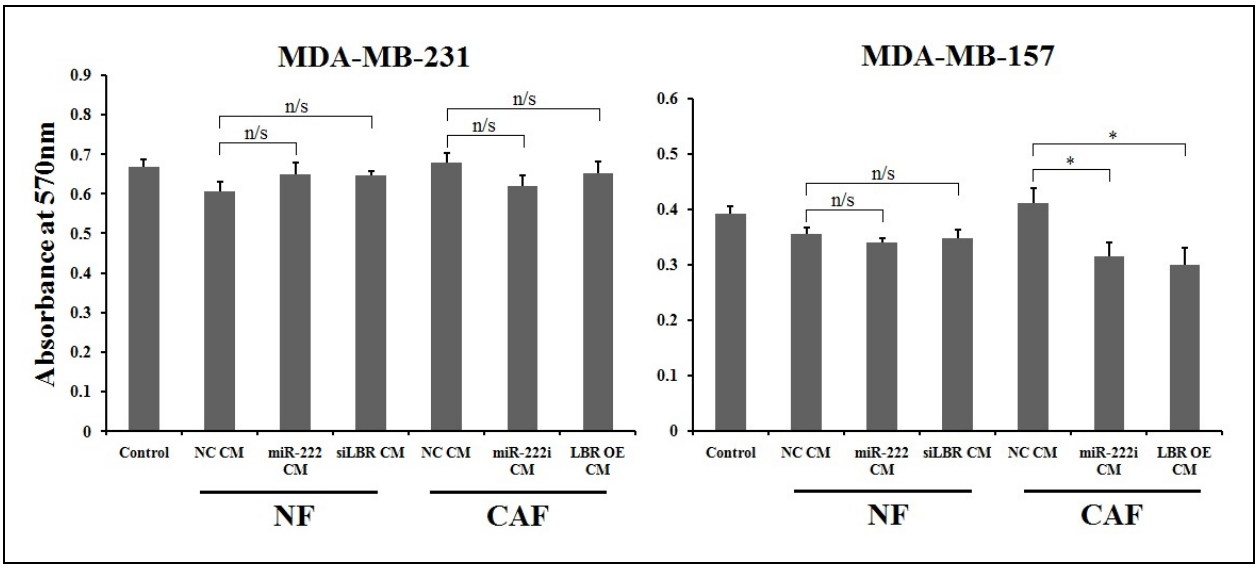

**Supplementary Figure S1:** Relative expression of the CAF marker, α-SMA / ACTA2 and Vimentin was assessed in immortalized breast NFs and CAFs by (A) immunofluorescence or (B) by Western blot (using β-Actin as a loading control).




**Supplementary Figure S2:** Representative matched pair of normal and breast cancer tissues was assessed for expression of CAF marker α-Sma by immunohistochemistry (10X and 20X magnification).




**Supplementary Figure S3:** Immortalized breast NFs (A) were transfected with miR-222 mimic or siRNA targeting LBR (siLBR) or appropriate controls (NC), and immortalized breast CAFs (B) were transfected with miR-222 inhibitor (i) or to over-express LBR (LBR OE) or with appropriate controls (NC, pCDNA). MTT assay were performed 72h post-transfection. Data represent biological triplicates.




**Supplementary Figure S4:** Immortalized breast NFs were transfected with miR-222 mimic or siRNA targeting LBR (siLBR) or appropriate controls (NC), and immortalized breast CAFs were transfected with miR-222 inhibitor (i) or to over-express LBR (LBR OE) or with appropriate controls (NC).Conditioned medium (CM) was collected from fibroblast cultures and used to treat breast epithelial cancer lines MDA-MB-231 or MDA-MB-157. After that cells were seeded for the proliferation assay. Proliferation of MDA-MB-231(Left panel) or MDA-MB-157(Right panel) cell lines cultured with conditioned medium (CM) from the transfected fibroblasts as labelled was determined using MTT assay. Data represent biological triplicates, $p < 0.05$(*).

**SUPPLEMENTARY TABLE S1(List of Primers)**

| GENE | FORWARD PRIMER | REVERSE PRIMER |
|---|---|---|
| ACTA2 | GATGGTGGGAATGGGACAAA | GCCATGTTCTATCGGGTACTTC |
| 18S | GTAACCCGTTGAACCCCATT | CCATCCAATCGGTAGTAGCG |
| IL6 | ACCTTCCAAAGATGGCTGAA | CTGGCTTGTTCCTCACTACTC |
| IL8 | GGAACCATCTCACTGTGTGTAA | GGGTGGAAAGGTTTGGAGTAT |
| CCL2 | AGCAGCAAGTGTCCCAAA | TGTGGAGTGAGTGTTCAAGTC |
| FSP | TGGATGTGATGGTGTCCACCTT | CTGGAAAGCAGCTTCATCTGTC |
| VEGF | CAGGACATTGCTGTGCTTTG | CTCAGAAGCAGGTGAGAGTAAG |
| OPN | CATATGATGGCCGAGGTGATAG | AGGTGATGTCCTCGTCTGTA |
| MMP3 | GTGAGGACACCAGCATGAA | GACCACTGTCCTTTCTCCTAAC |
| Vimentin | CAGCTTTCAAGTGCCTTTCTG | CTTGTAGGAGTGTCGGTTGTT |
| Slug | AACTACAGCGAACTGGACAC | GAGGATCTCTGGTTGTGGTATG |
| LBR | CTGGCAGTGAGAACCTTTGA | CAGGCCAAACATGATGAGAAAC |
| | | |
| LBR Cloning | GTGGTACCACCATGCCAAGTAGGAAATTTG | GCTCTAGAGCTTAGTAGATGTATGGAAATATACGG |
| | | |
| LBR WT (Luciferase) | AAACTAGCGGCCGCTAGTAGTTGAAAATAAAATGTAGCAT | CTAGATGCTACATTTTATTTTCAACTACTAGCGGCCGCTAGTTT |
| LBR Mutated (Luciferase) | AAACTAGCGGCCGCTAGTAGTTGAAAATAAAATAGCGCAT | CTAGATGCGCTATTTTATTTTCAACTACTAGCGGCCGCTAGTTT |
| | | |
| miR-222 | AGCTACATCTGGCTACTGG | |