

cells transfected with control RNAi. **F**, Schematic diagram of regulation of BRCA1 expression by the MTA1/NuRD complex.

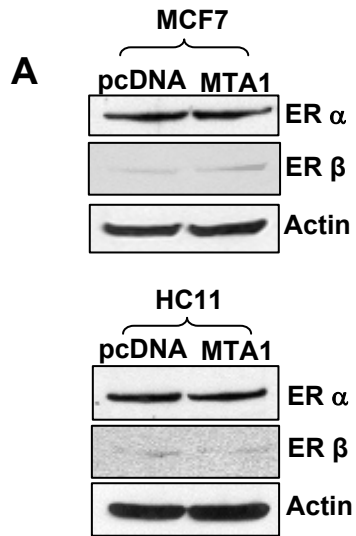
**Figure 6. MTA1 over expression and resulting increases in centrosome number.** **A**, Western blot analysis showing endogenous MTA1, T7- pcDNA, T7-MTA1 plasmid expression in transfected MCF7 and HC11 cells. Significant decreases in the protein BRCA1 level in the presence of MTA1 over expression in HC11 cells. Tubulin was used as an internal control. **B**, Representative immunofluorescent images for  $\alpha$ -tubulin (green), pericentrin (red) and DNA (blue) as seen under a confocal laser microscope are shown here. Cells were synchronized with double thymidine block. A total of 100 cells were counted. **C**, Bar chart showing quantified results. MTA1 over expression led to an increase in number of cells with multiple spindle poles.

**Figure 7. Role of BRCA1 in the multiple spindle phenotype observed in MTA1-over expressing cells.** **A**, MCF7/MTA1 cells transfected with GFP vector or GFP-BRCA1 was assessed by immunofluorescence staining for GFP (green),  $\alpha$ -tubulin (Magenta), pericentrin (red) and DAPI stained DNA (blue). MTA1 over expression led to an increase in the number of centrosomes; this phenotype was compromised, however, by the reintroduction of BRCA1, thus implicating BRCA1 repression in the centrosome amplification observed in MTA1-overexpressing cells. **B**, Bar chart showing quantified results.

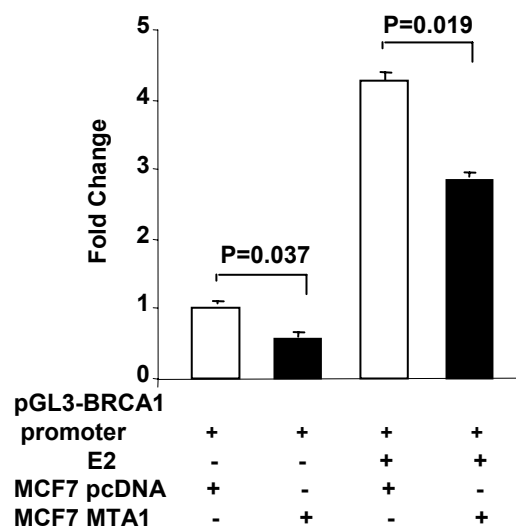
**Supplementary figure 1. ER $\alpha$  and ER $\beta$  expression in MCF7 and HC11 cells.** Western blot analysis of ER $\alpha$  and ER $\beta$  in MCF7/pcDNA, MCF7/MTA1, HC11/pcDNA and HC11/MTA1 cells. Actin was used as an internal control.

**Supplementary figure 2. Effect of estrogen on MTA1 mediated BRCA1 repression.** pGL3 BRCA1-luciferase activity demonstrating relief of BRCA1 expression on treatment with E2 in

both MCF7/pcDNA and MCF7/MTA1 cells. Results also demonstrate that MTA1 mediated repression of BRCA1 is E2 independent.



## Supplementary Information 1



## Supplementary Information 2