Supplementary Figure 1  MDM4 protein (A) and mRNA expression (B) correlation with rs4245739 genotype in model cell lines and effects of miR-191-5p and miR-887 overexpression on MDM4 mRNA in PC3 cells  (C) and on protein in OV90 cell line (D)
Representative Western blot of MDM4 protein levels in prostate cancer (LNCaP, 22RV1, DU145, PC3) and ovarian cancer cells (OAW42, OV90, SKOV3) versus genotype. MDM4 protein levels are lower in the rs4245739 heterozygous A/C lines (PC3 and OV90) compared to the homozygous A/A cell lines. (B) qPCR analyses of MDM4 mRNA levels versus genotype (n = 2). MDM4 mRNA expression displays a similar pattern with the expression for A/C genotype cell lines being lower than the highest expressing A/A genotype lines and similar to the lowest expressing A/A lines. (C) Using qRT-PCR analysis no decrease of MDM4 mRNA following over-expression of miR-887 and miR-191-5p was observed in PC3 cells although overexpression of +ve control was found to decrease the MDM4 mRNA. (D) miR-887 and miR-191-5p induce MDM4 protein reduction in OV90 cells heterozygous A/C for the rs4245739 SNP. Western blot densitometry analysis with mean +/- SD, n = 2 for MDM4 in the ovarian cancer cell line OV90 post over-expression of miR-887 and miR-191-5p.