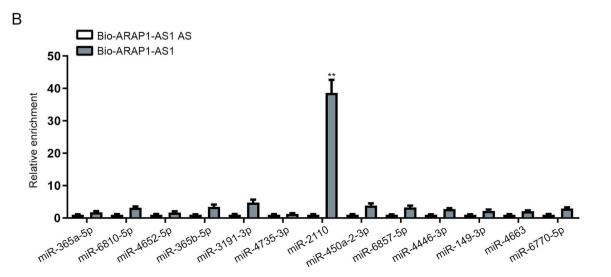
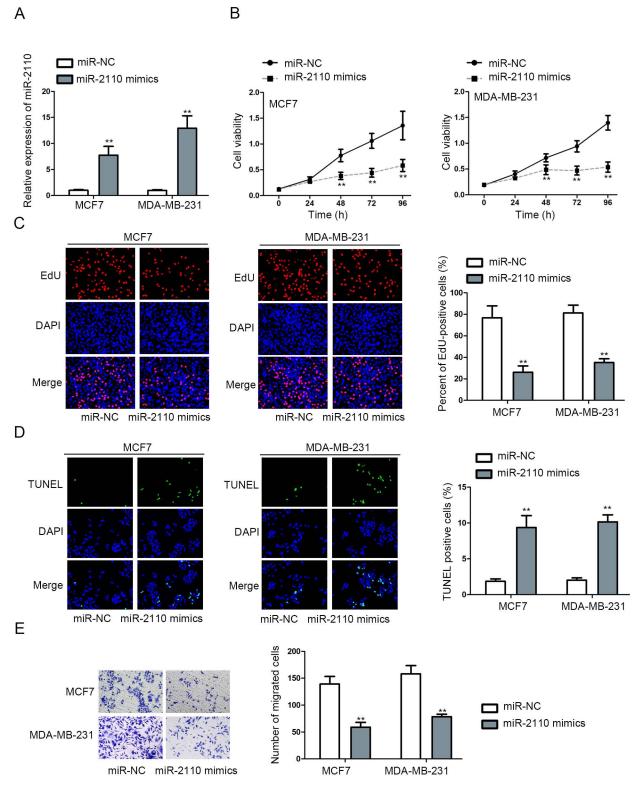
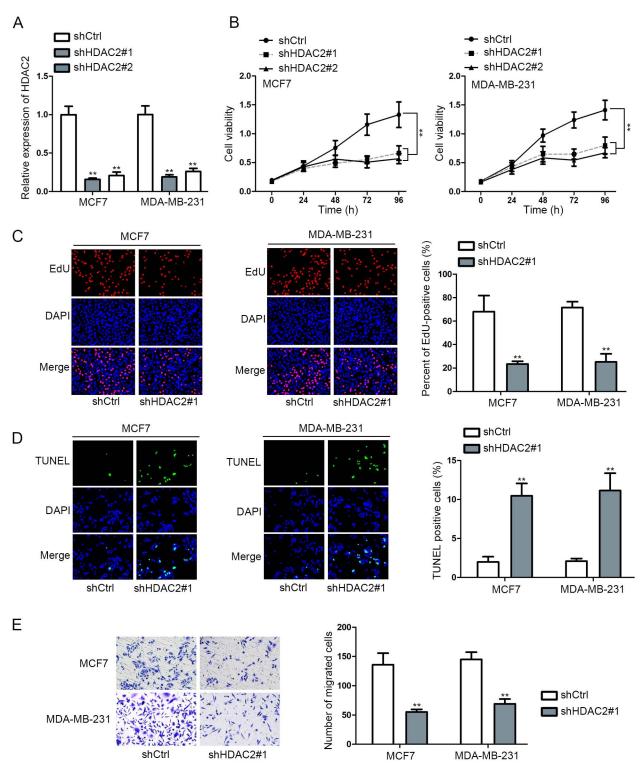
Gene	miRNA	Score	DIANA Links
ARAP1-AS1	hsa-miR-365a-5p	0.929	mT TB InE mP
ARAP1-AS1	hsa-miR-6810-5p	0.889	mT TB InE mP
ARAP1-AS1	hsa-miR-4652-5p	0.881	mT TB InE mP
ARAP1-AS1	hsa-miR-365b-5p	0.878	mT TB InE mP
ARAP1-AS1	hsa-miR-3191-3p	0.858	mT TB InE mP
ARAP1-AS1	hsa-miR-4735-3p	0.848	mT TB InE mP
ARAP1-AS1	hsa-miR-2110	0.823	mT TB InE mP
ARAP1-AS1	hsa-miR-450a-2-3p	0.820	mT TB InE mP
ARAP1-AS1	hsa-miR-6857-5p	0.820	mT TB InE mP
ARAP1-AS1	hsa-miR-4446-3p	0.745	mT TB InE mP
ARAP1-AS1	hsa-miR-149-3p	0.727	mT TB InE mP
ARAP1-AS1	hsa-miR-4663	0.722	mT TB InE mP
ARAP1-AS1	hsa-miR-6770-5p	0.704	mT TB InE mP



**Supplementary Figure 1** (A) A group of miRNAs that might bind with ARAP1-AS1were obtained through DIANA Tools. (B) RNA pull down assay detected the enrichment of the miRNAs in bio-ARAP1-AS1 (sense) and bio-ARAP1-AS1 AS (anti-sense) groups. \*\* P<0.01.



**Supplementary Figure 2** (A)The overexpression efficiency of miR-2110 was evaluated by qRT-PCR. (B-C) BC cell viability and proliferation abilities were measured by CCK-8 andEdUassays. (D) BC cell apoptosis was tested by TUNEL assay. (E) BC cell migration ability was detected by transwell assay. \*\* P<0.01.



**Supplementary Figure 3** (A)The knockdown efficiency of HDAC2 was evaluated by qRT-PCR. (B-C) BC cell viability and proliferation abilities were measured by CCK-8 andEdUassays. (D) BC cell apoptosis was tested by TUNEL assay. (E) BC cell migration ability was detected by transwell assay. \*\* P<0.01.