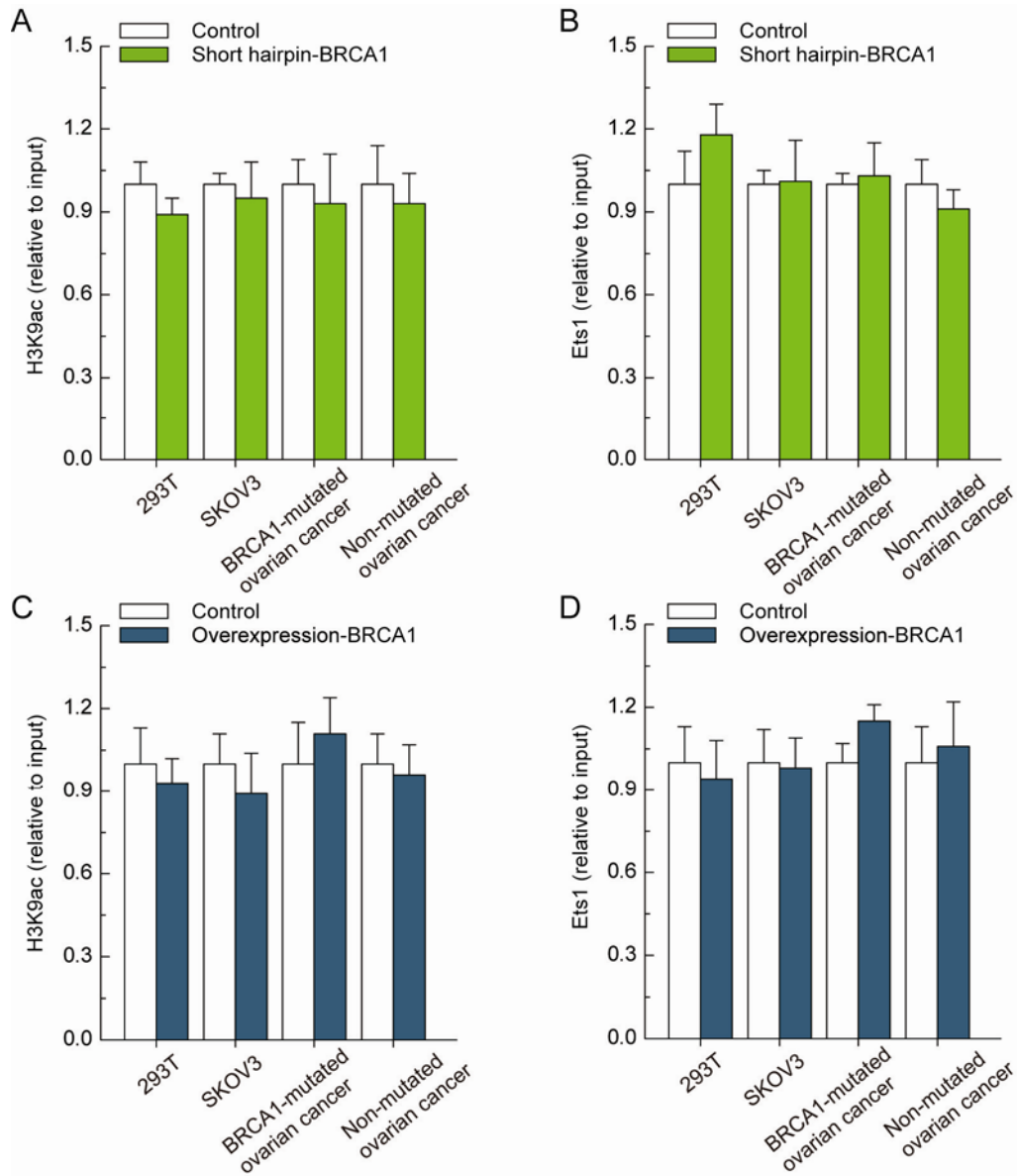


Supplementary Figure 1. H3K9ac (A and C) or ETS1 (B and D) enrichment after silencing (A and B) or overexpression (C and D) of BRCA1 in 293T cells, SKOV3 cells, primary non-mutated and BRCA1-mutated ovarian cancer cells.



Supplementary Table 1. Primers used in this study.

Gene	Primers	Description
PARP1-promoter-F	5'- AATAAAAGGGGGAGGGGTTG	Promoter amplification
PARP1-promoter-R	5'- GAAAGGAGAAGAGAAGAGGC	
PARP1-RTP-F	5'- GAGTCGGCGATCTTGGACC	Real-time PCR for PARP1
PARP1-RTP-R	5'- TGACCCGAGCATTCTCTCG	
GAPDH-RTP-F	5'- AGGTGAAGGTCGGAGTCA	Real-time PCR for GAPDH
GAPDH-RTP-R	5'- GGTCATTGATGGCAACAA	
GCN5-SQP	Santa Cruz Biotech GCN5 (h)-PR: sc-37946-PR	Semi-quantitative PCR for GCN5
PCAF-SQP	Santa Cruz Biotech PCAF (h)-PR: sc-36198-PR	Semi-quantitative PCR for PCAF
ETS1-SQP	Santa Cruz Biotech ETS-1 (h)-PR: sc-29309-PR	Semi-quantitative PCR for ETS1
PARP1-ChIP-RTP-F	5'- CAGCGTGTTTCTAGGTCGTG	ChIP for PARP1 (Detection
PARP1-ChIP-RTP-R	5'- GATAGAGCTTATCCGAAGAC	by real-time PCR)
PARP1-ChIP-SQP-F	5'- ATCAGCAATCTATCAGGGAA	ChIP for PARP1 (Detection
PARP1-ChIP-SQP-R	5'- TGCTCTCGCTGCATTTCTTG	by semi-quantitative PCR)
PARP1-Mutation1-F	5'- CCGTGGACGCGGGTTCTGTGGGCGTTCCCGC	A point mutation at the site
PARP1-Mutation1-R	5'- GCGGGAACGCCACAGAACCCGCGTCCACGG	of -31 (C to T)
PARP1-Mutation2-F	5'- GGCGTCGGGCTTCTGGAGCTTTGGCGGCAGC	A point mutation at the site
PARP1-Mutation2-R	5'- CTGCCGCCAAAGCTCCAGAAGCCCGACGCCA	of +133 (C to T)

List of abbreviations used: F, Forward primer; R, Reverse primer; RTP, Real-time PCR; SQP, Semi-quantitative PCR; ChIP, Chromatin immunoprecipitation.

Supplementary Table 2. List of commercial antibodies.

Antibody	Company (catalog number)	Description
H3K9Ac	Abcam (ab4441)	ChIP
H3K18Ac	Abcam (ab1191)	ChIP
H3K27Ac	Millipore (07-360)	ChIP
H3K4me1	Abcam (ab8895)	ChIP
H3K4me2	Abcam (ab7766)	ChIP
H3K4me3	Abcam (ab8580)	ChIP
H3K36me3	Abcam (ab9050)	ChIP
H3K79me	Abcam (ab2886)	ChIP
H3K9me	Abcam (ab9045)	ChIP
H3K9me2	Millipore (07-441)	ChIP
H3K9me3	Abcam (ab8898)	ChIP
H3K27me	Millipore (07-448)	ChIP
H3K27me2	Millipore (07-452)	ChIP
H3K27me3	Millipore (07-449)	ChIP
Ets1	Santa Cruz (sc-350)	ChIP, CO-IP, WB
GCN5	Santa Cruz (sc-20698)	CO-IP, WB
PCAF	Santa Cruz (sc-13124)	CO-IP, WB

List of abbreviations used: ChIP, Chromatin immunoprecipitation; CO-IP, Co-immunoprecipitation; WB, Western blotting.