

Figure S1. Additive effect of KB9520 on cisplatin sensitivity in SKOV3 and A2780cis/ER α cells

Percentage of growth inhibition in **A)** SKOV3 and **B)** A2780cis/ER α cells after 24 hours treatment with different doses of cisplatin, in the range of 1 μ M to 160 μ M alone or in combination with 10 nM of KB9520 or PPT. Results are expressed as mean \pm s.d.) of three independent experiments. * $p \leq 0.05$.

Figure S2. Additive effect of KB9520 on paclitaxel sensitivity in A2780cis cells

Percentage of growth inhibition in A2780cis cells after 24 hours treatment with different doses of paclitaxel, in the range of 10 nM to 1 μ M alone or in combination with 10 nM of KB9520 or PPT. Results are expressed as mean \pm s.d. of three independent experiments. * $p \leq 0.05$.

Figure S3. KB9520 treatment induces KDM6B expression in A2780cis cells

Real time-PCR analyses of *KDM6B* and *EZH2* expression in A2780cis cells treated or not with 10nM KB9520 for 2, 4 or 6 hours. 18S rRNA was used as housekeeping gene. Results are expressed as mean \pm s.d. of three independent experiments. * $p \leq 0.05$.

Figure S4. Role of KDM6B for A2780cis cell response to cisplatin in combination with KB9520

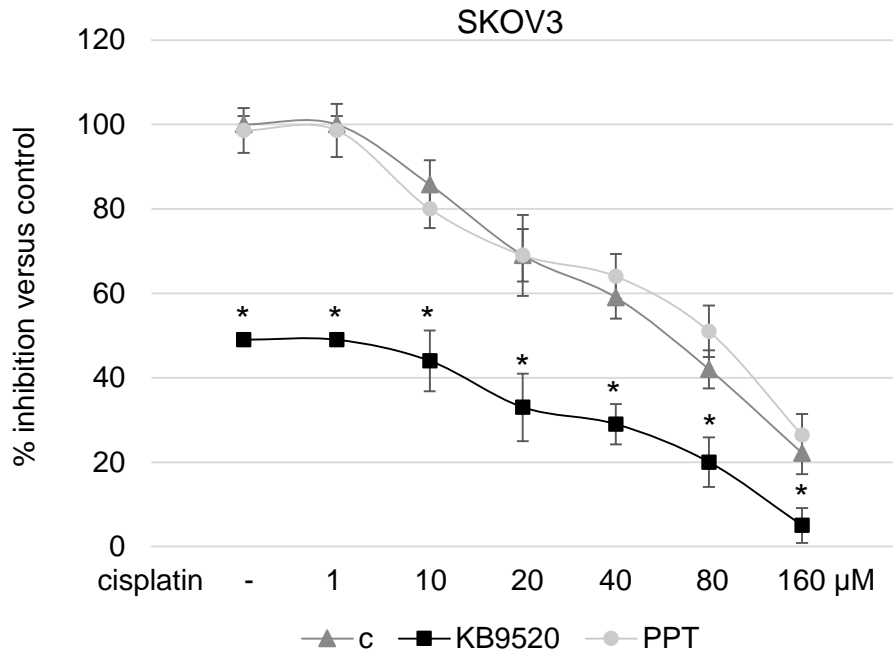
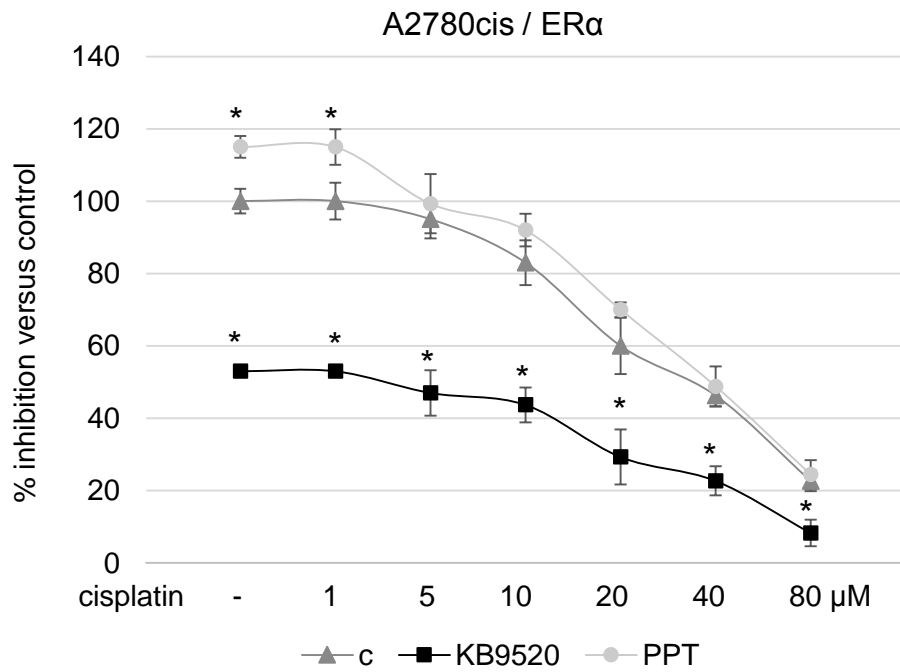
Cell cycle analysis of A2780cis cells transfected with **A-C)** non specific or **D)** *KDM6B* specific siRNAs and treated 24 hours with 40 μ M of cisplatin alone or in combination with 10 nM of KB9520. After treatments, cells were stained with propidium iodide and analyzed for cellular DNA content by flow cytometry. Exemplificative histograms that plot cell count versus DNA content are reported for each treatment. The percentages of cells in sub-G1 are reported below each plot.

Figure S5. KB9520 treatment does not induce ER α acetylation

Immunoprecipitation of ER α , from lysates of A2780cis cells treated or not for 2 hours with 10nM of KB9520; lysine acetylation and co-immunoprecipitated proteins were detected by Western blot analyses using the respective antibodies (Ac Lys, ER α and p300).

Figure S6. Role of SIRT1 for ER β de-acetylation in A2780cis cells

A) Immunoprecipitation of ER β , from lysates of A2780cis cells treated or not for 2 or 4 hours with 10nM of KB9520 alone or in combination with 10 μ M EX527; lysine acetylation and immunoprecipitated ER β were detected by Western blot analyses using the respective antibodies. **B)** Immunoprecipitation of p300, from lysates of A2780cis cells treated or not for 2 hours with 10nM of KB9520 alone or in combination with 10 μ M EX527; lysine acetylation and co-immunoprecipitated proteins were detected by Western blot analyses using the respective antibodies (p300, SIRT1 and ER β).

A**B**

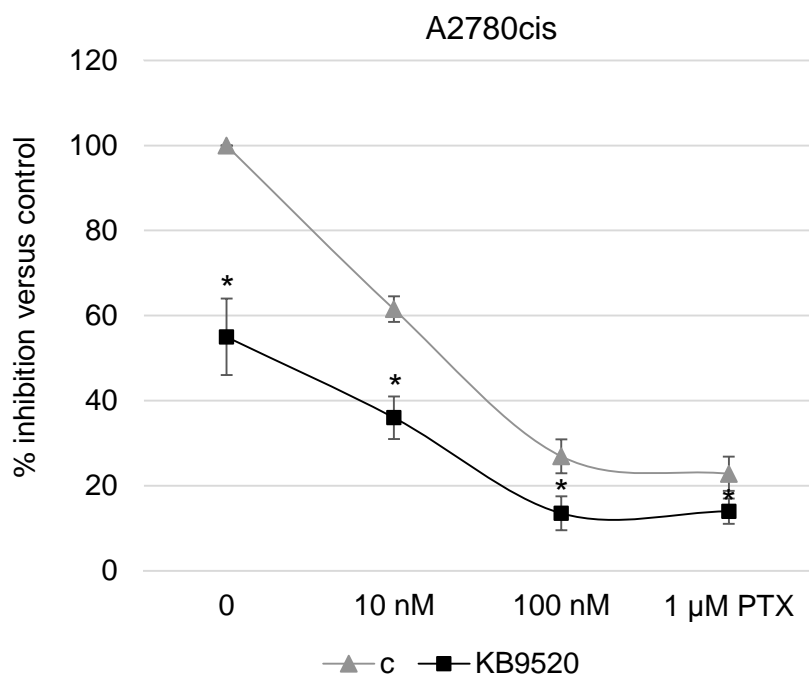


Figure S2

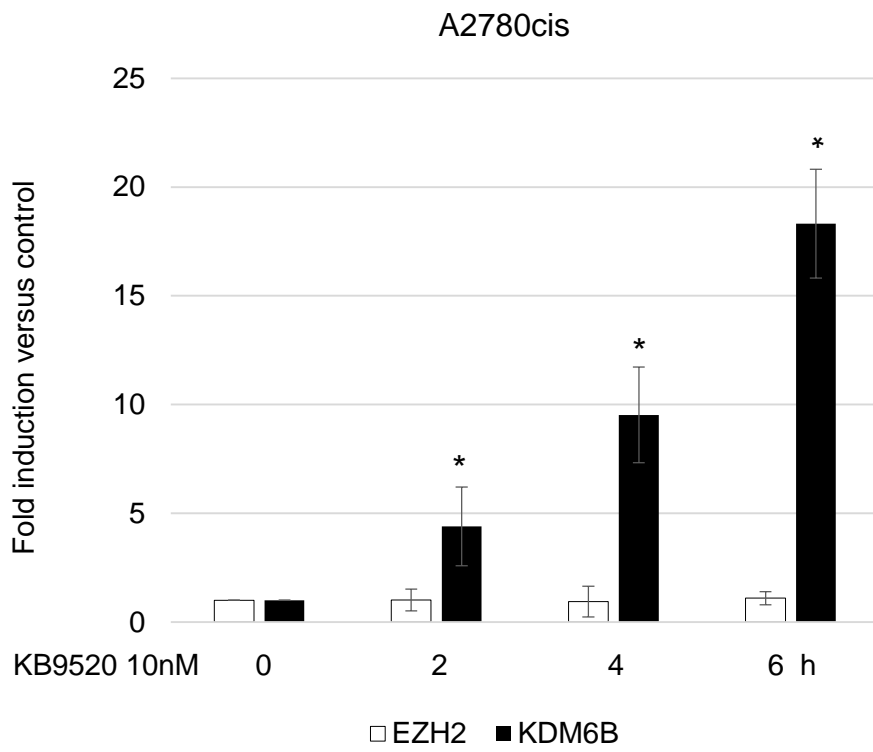
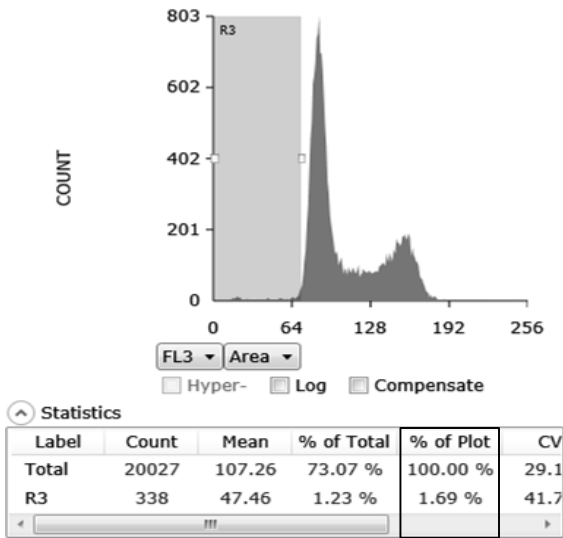
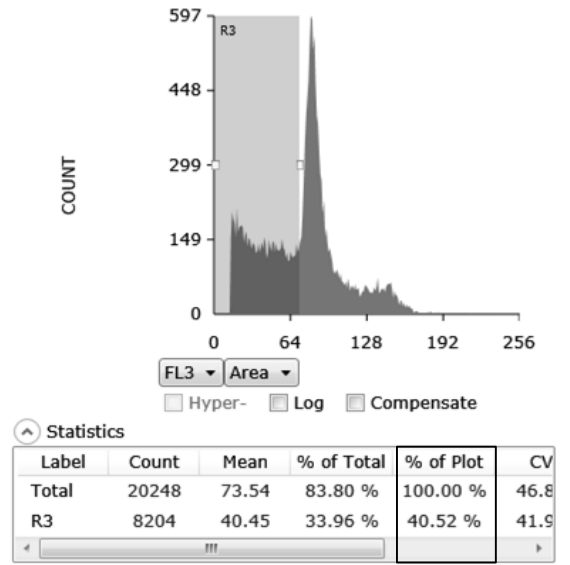
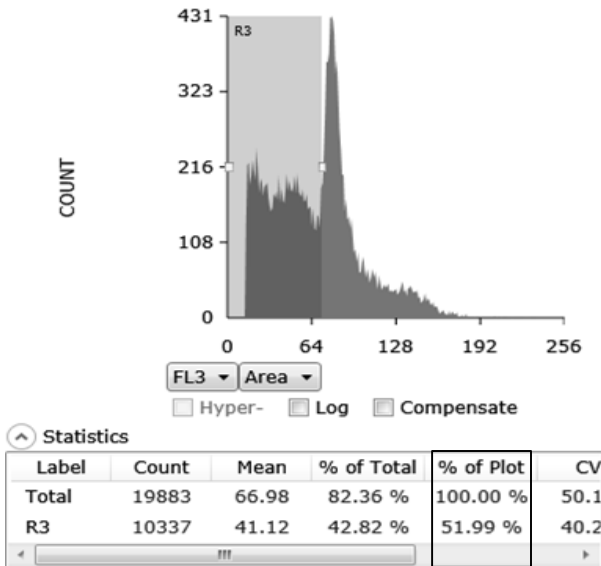
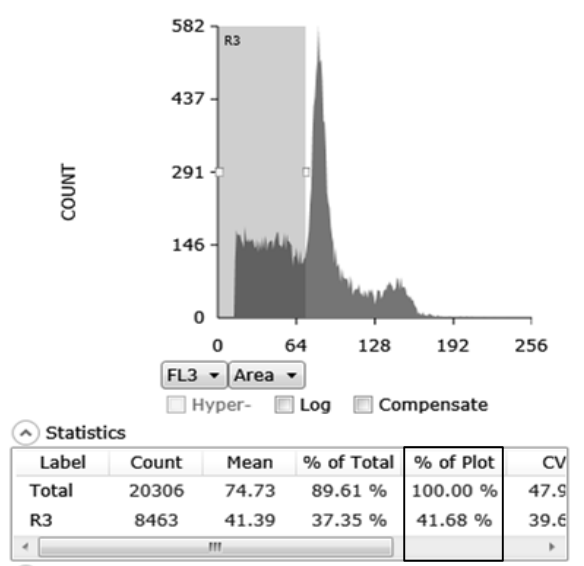


Figure S3

A**C****B**Cis 40 μ M**C**Cis 40 μ M / KB9520**D**siRNA KDM6B / Cis 40 μ M / KB9520

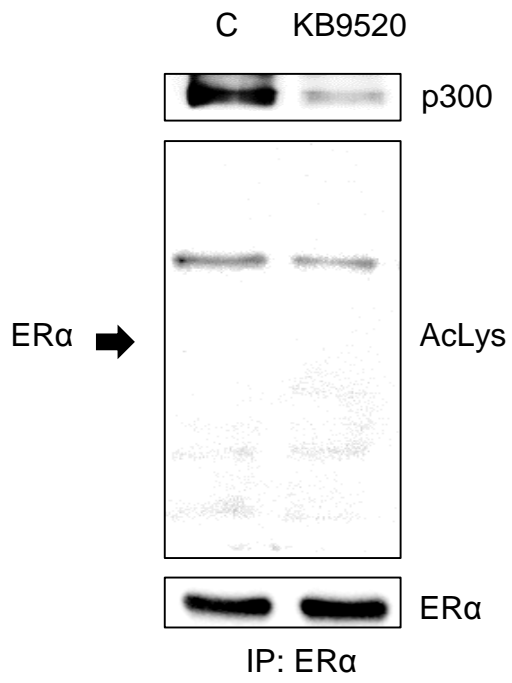
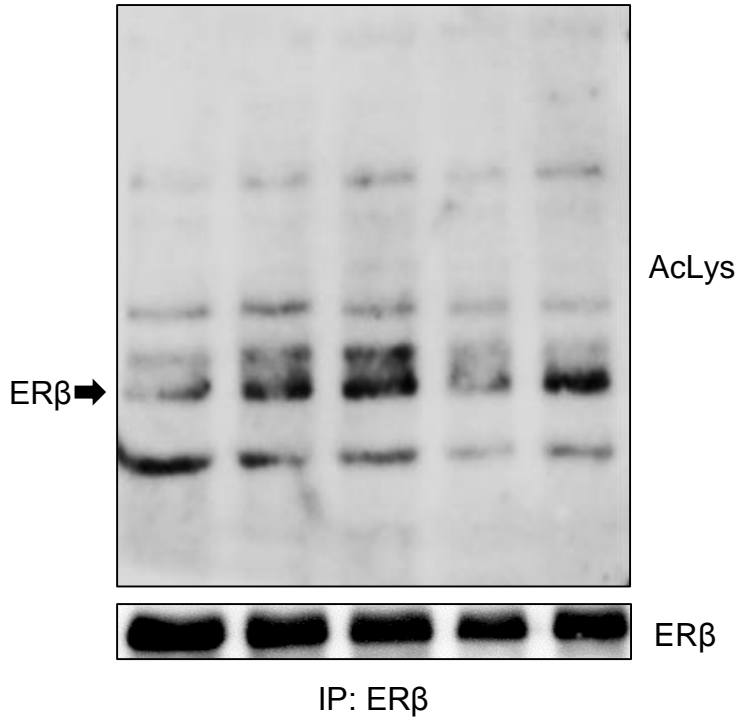


Figure S5

A

EX527 10 μ M	-	-	+	-	+
KB9520 10nM	-	2	2	4	4 h



B

EX527 10 μ M	-	-	+	
KB9520 10nM	-	2	2	h

