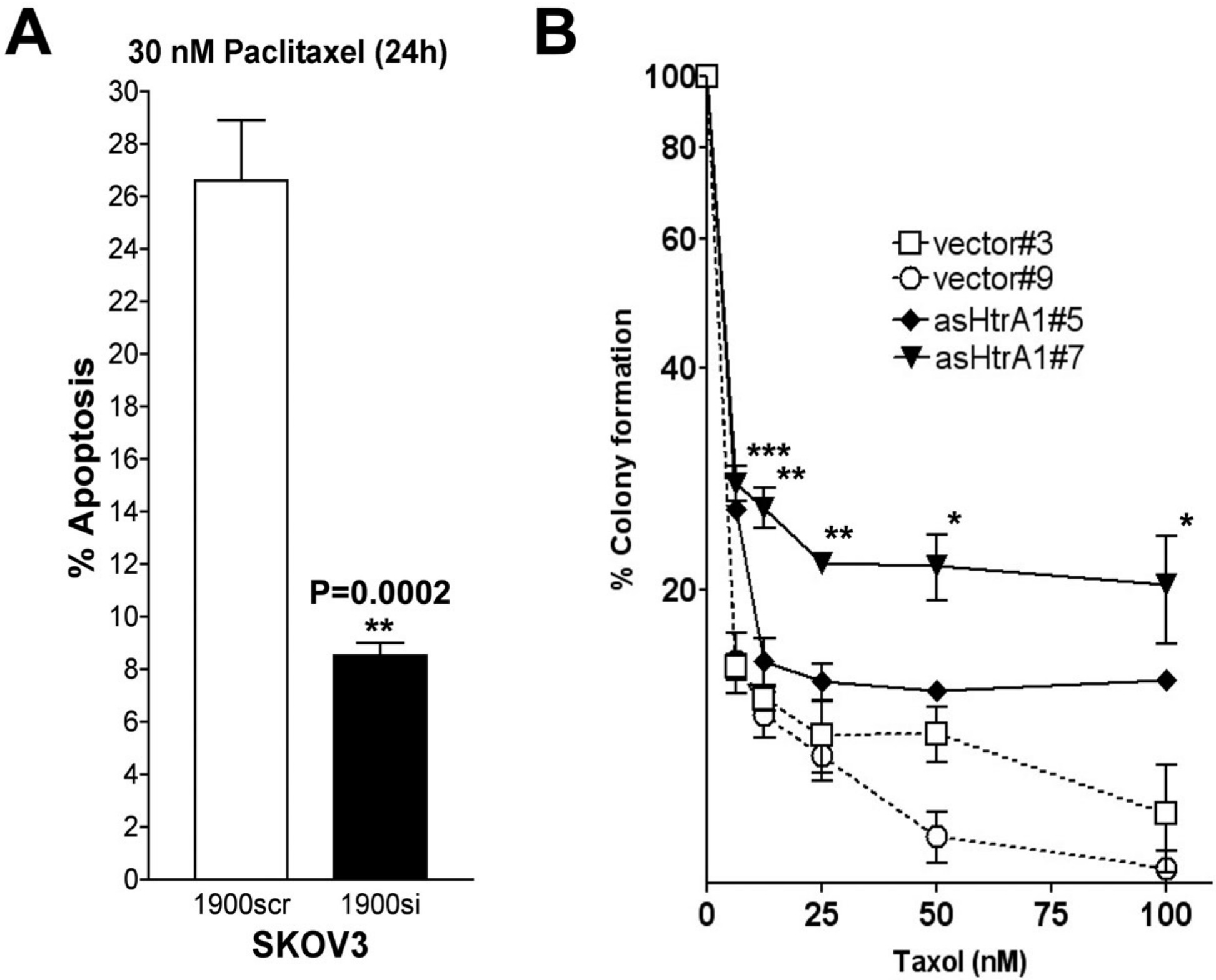
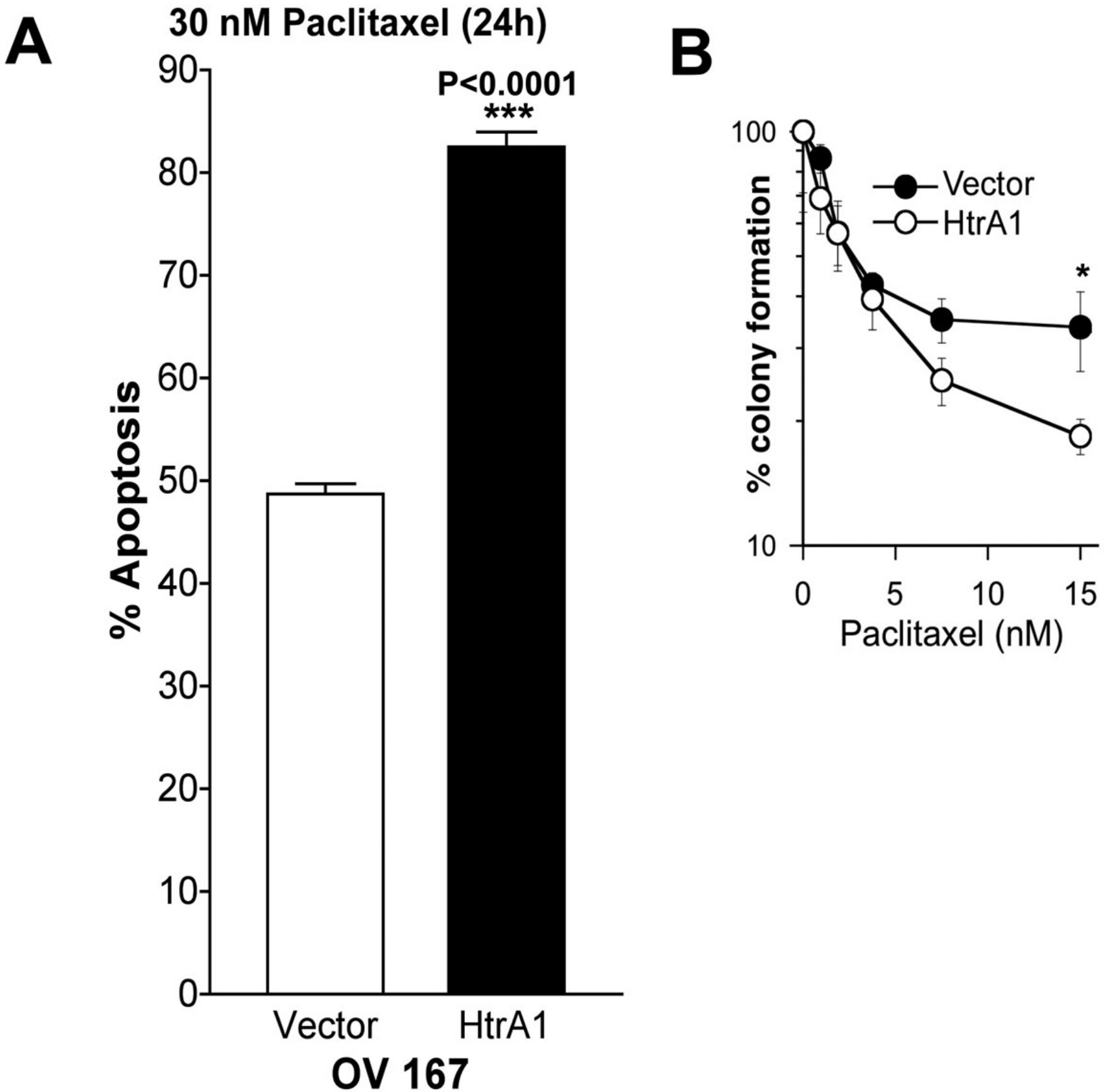
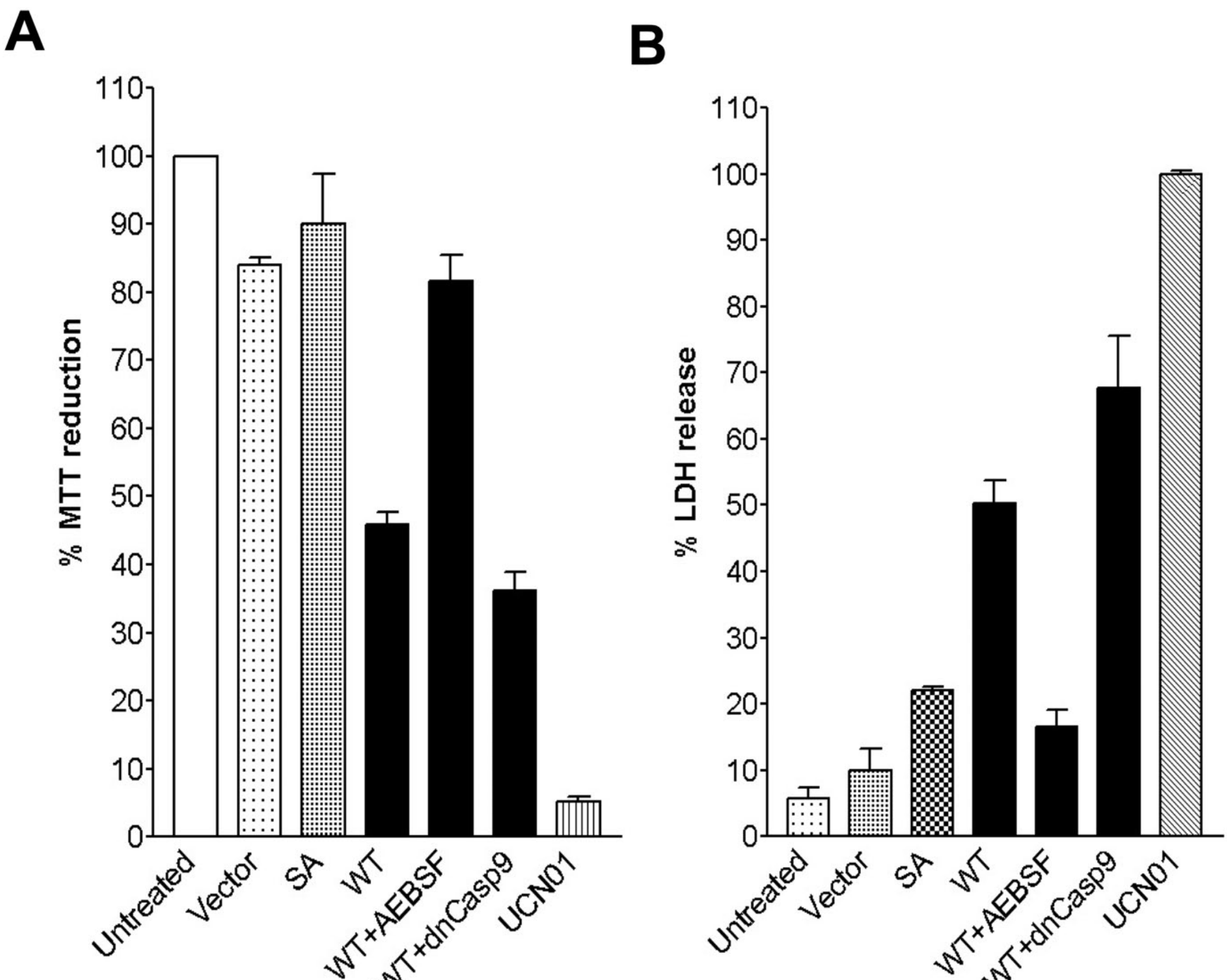

A
30 nM Paclitaxel (24h)
% Apoptosis
30
28
26
24
22
20
18
16
14
12
10
8
6
4
2
0
P=0.0002
**
1900scr
1900si
SKOV3
B
% Colony formation
100
80
60
40
20
vector#3
vector#9
asHtrA1#5
asHtrA1#7
***
**
**
*
*
0
25
50
75
100
Taxol (nM)

Supp. Fig. 1A-B


A
30 nM Paclitaxel (24h)
P<0.0001
***
% Apoptosis
90
80
70
60
50
40
30
20
10
0
Vector
HtrA1
OV 167
B
100
10
% colony formation
Vector
HtrA1
*
0
5
10
15
Paclitaxel (nM)

Supp. Fig. 2A-B


A
% MTT reduction
110
100
90
80
70
60
50
40
30
20
10
0
Untreated
Vector
SA
WT
WT+AEBSF
WT+dnCasp9
UCN01
B
% LDH release
110
100
90
80
70
60
50
40
30
20
10
0
Untreated
Vector
SA
WT
WT+AEBSF
WT+dnCasp9
UCN01

Supp. Fig. 3A-B

Supplementary Figure 1. Suppression of HtrA1 by siRNA attenuates paclitaxel cytotoxicity. **A:** Following HtrA1 suppression by RNAi, cells were treated with 30 nM paclitaxel, and apoptotic cells were counted. These analyses showed a significant attenuation of apoptosis in cells transfected with HtrA1 siRNA (1900si) compared to those transfected with scrambled siRNA (1900scr). **B:** SKOV3 cells lines treated with various concentrations of paclitaxel showed a siginificant increase in clonogenic survival in anti-sense clones (asHtrA1#5 and #7) compared to vector-expressing clones (vector#3 and #9). Data are expressed as mean ± s.e.m and represent three independent trials containing at least triplicates. (* $P<0.05$, ** $P<0.001$, *** $P=0.0001$, or as indicated; $\alpha=0.05$, unpaired Two-tailed *t* test for two groups, and ANOVA followed by Newman-Keuls test for multiple comparison).

Supplementary Figure 2. Re-expression of HtrA1 promotes paclitaxel cytotoxicity **A:** HtrA1-transfected OV167 cells showed a significant increase in paclitaxel-induced cell death compared to those cells transfected with empty vector. **B:** OV167 cells stably expressing HtrA1 also showed a significant decrease in clonogenic survival under paclitaxel treatment compared to vector-transfected cells. (* $P<0.05$, or as indicated; $\alpha=0.05$, unpaired Two-tailed *t* test for two groups, and ANOVA followed by Newman-Keuls test for multiple comparison).

Supplementary Figure 3. HtrA1-induced cell death is dependent on serine protease activity. Cell death was assessed by MTT reduction assay (A) or lactate dehydrogenase relase assay (B). **A-B**: Wild-type HtrA1 (WTΔMac)-transfected cells showed extensive cell death which can be prevented by pre-treatment with 50 μg/ml serine protease inhibitor AEBSF but not by co-transfection with dominant negative caspase 9 (dnCasp9). Vector- and protease mutant (SAΔMac)-transfected cells did not show extensive cell death. 20 μM UCN-01 treated cells were used as postive controls. Untransfected (Untreated) cells were used as controls and represented 100% survival in MTT reduction assay.