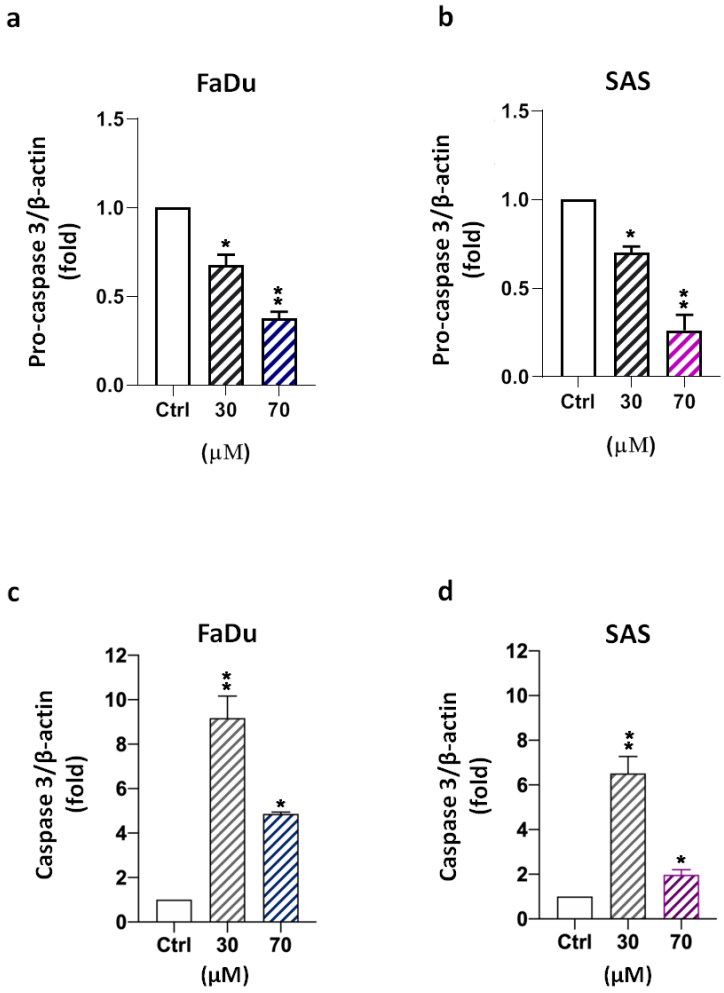
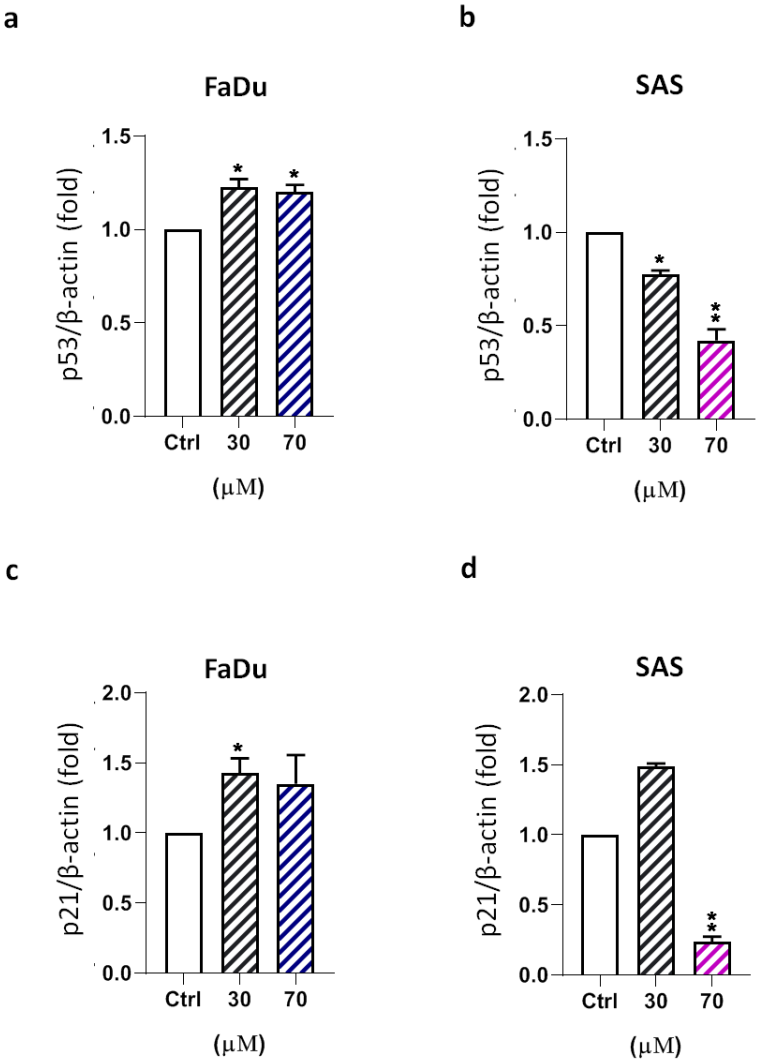
Supplementary figure 1



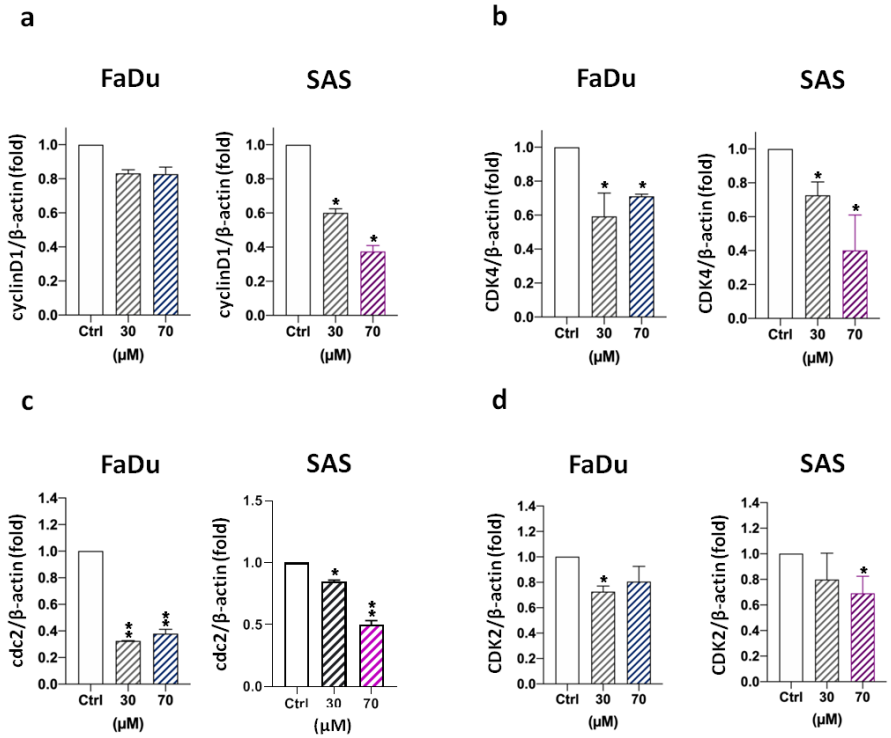
Supplementary Fig. 1 Quantification of Western blots represented in Figure 2C. Triplicates of the experiments shown in Figure 2C were quantified using densitometry (GraphPad Prism8 software). Densitometric analysis of all samples normalized against the level of total protein. The relative expression of pro-caspase 3 and β-actin are presented as pro-caspase 3/β-actin (fold) in (a) FaDu and (b) SAS, and caspase 3 and β-actin are presented as caspase-3/β-actin (fold) in (c) FaDu and (d) SAS. We used β-actin as the reference. All data are presented as means ± SEM, n = 3. *$p < 0.05$. **$p < 0.01$ compared to control (Ctrl).

Supplementary figure 2



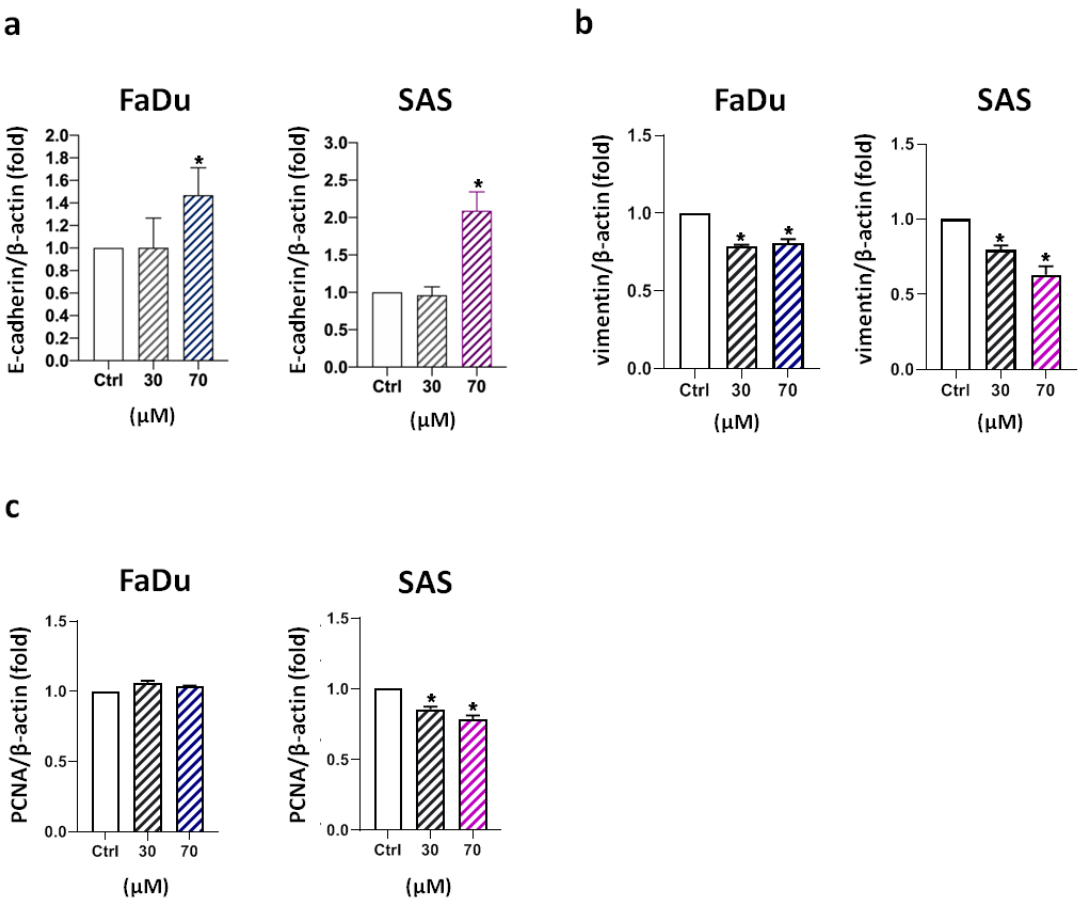
Supplementary Fig. 2 Quantification of Western blots represented in Figure 3B. Triplicates of the experiments shown in Figure 2C were quantified using densitometry (GraphPad Prism8 software). Densitometric analysis of all samples normalized against the level of total protein. The relative expression of p53 and β-actin are presented as p53/β-actin (fold) in (a) FaDu and (b) SAS, and p21 and β-actin are presented as p21/β-actin (fold) in (c) FaDu and (d) SAS. We used β-actin as the reference. All data are presented as means ± SEM, n = 3. *p < 0.05. **p < 0.01 compared to control (Ctrl).

Supplementary figure 3



Supplementary Fig. 3 Quantification of Western blots represented in Figure 3C. Triplicates of the experiments shown in Figure 2C were quantified using densitometry (GraphPad Prism8 software). Densitometric analysis of all samples normalized against the level of total protein. The relative expression of cyclin D1 and β-actin is presented as cyclin D1/β-actin (fold) in (a) FaDu and SAS, and that of CDK4 and β-actin is presented as CDK4/β-actin (fold) in (b) FaDu and SAS. Densitometric analysis of all samples normalized against the level of total protein. The relative expression of cdc2and β-actin is presented as cdc2/β-actin (fold) in (c) FaDu and SAS, and that of CDK2 and β-actin is presented as CDK2/β-actin (fold) in (d) FaDu and SAS. We used β-actin as the reference. All data are presented as means ± SEM, n = 3. *$p < 0.05$. **$p < 0.01$ compared to control (Ctrl).

74 Supplementary figure 4



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76 **Supplementary Fig. 4** Quantification of Western blots represented in Figure 4C. Triplicates
77 of the experiments shown in Figure 2C were quantified using densitometry (GraphPad
78 Prism8 software). Densitometric analysis of all samples normalized against the level of total
79 protein. The relative expression of E-cadherin and β-actin is presented as E-cadherin/β-actin
80 (fold) in (a) FaDu and SAS, and that of vimentin and β-actin is presented as vimentin/β-actin
81 (fold) in (b) FaDu and SAS. Densitometric analysis of all samples normalized against the
82 level of total protein. The relative expression of PCNA and β-actin is presented as
83 PCNA/β-actin (fold) in (c) FaDu and SAS. All data are presented as means ± SEM, n = 3. *p
84 < 0.05 compared to control (Ctrl).
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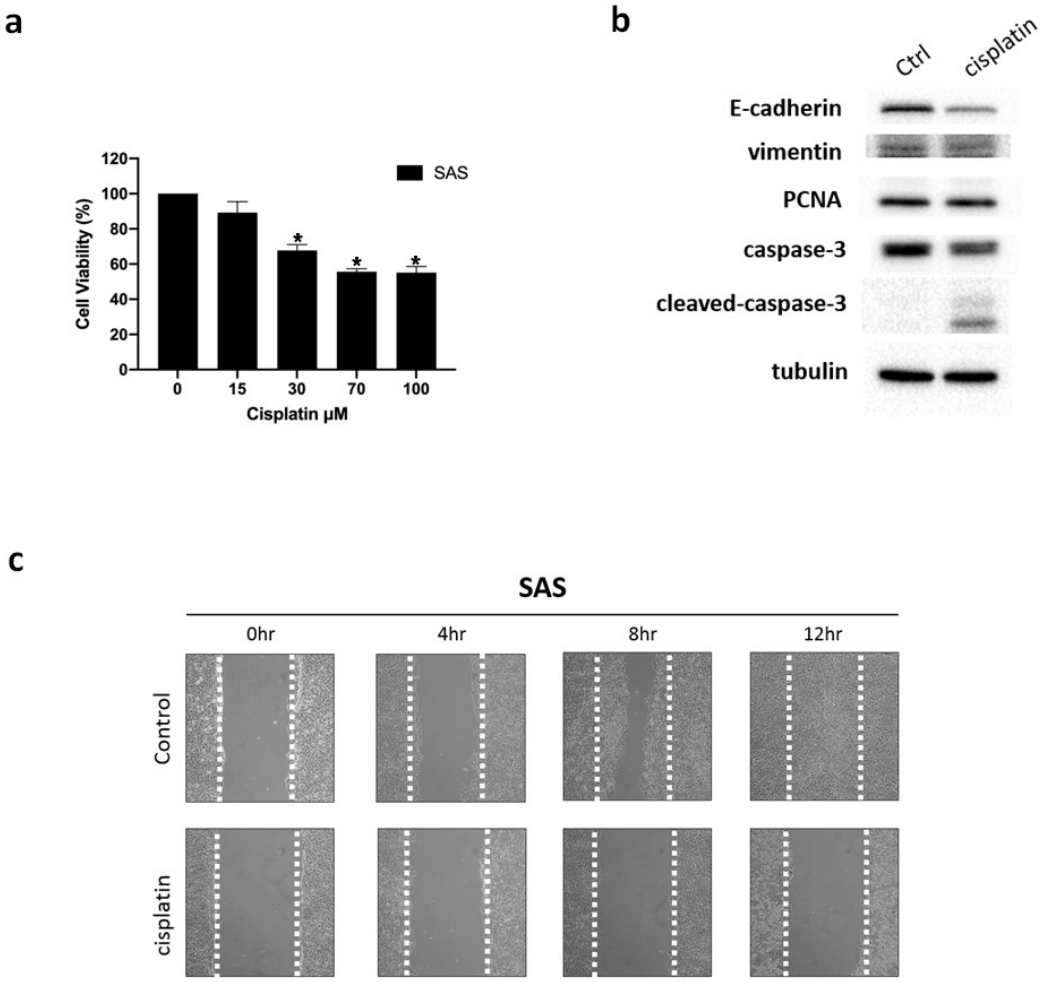
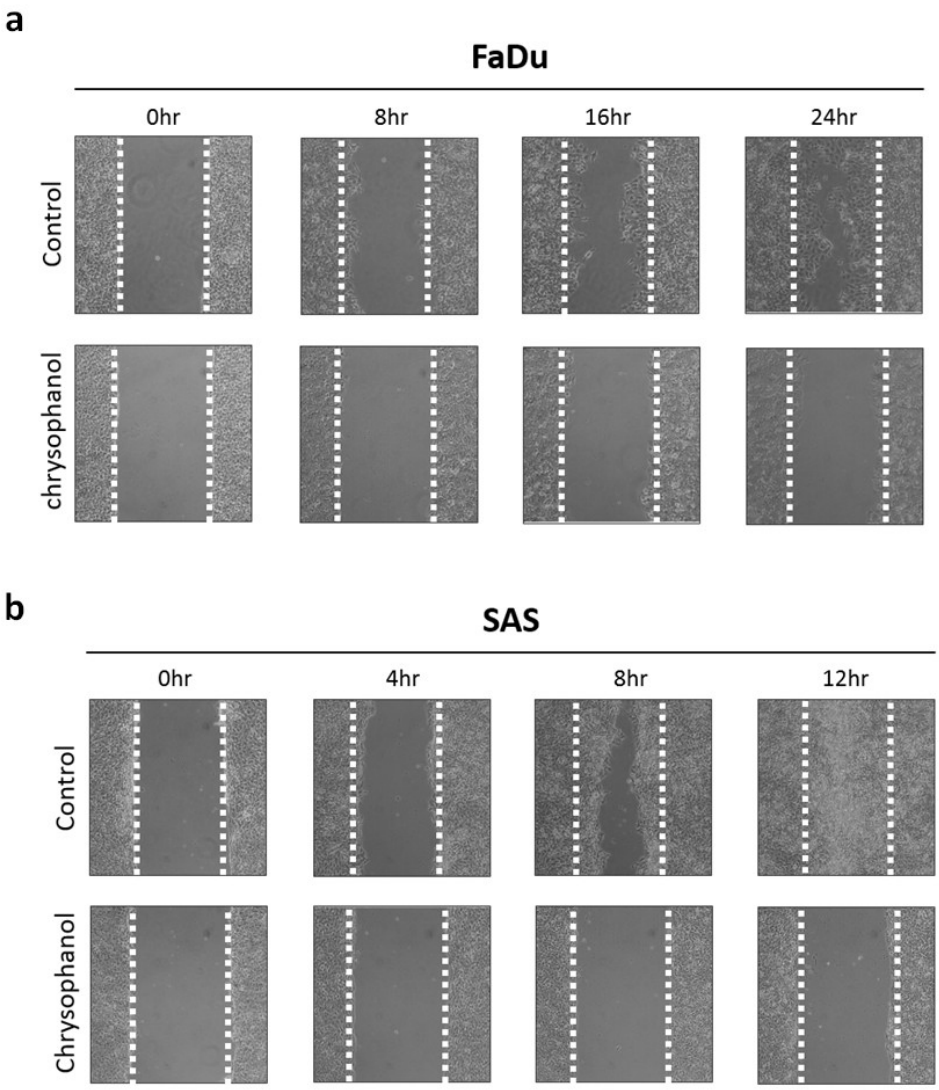
Supplementary figure 5



Supplementary Fig. 5 Effect of cisplatin on cell viability, EMT, apoptosis, and migration. (a) After the incubation time course, cell viability was determined by using the MTT assay. Data are presented as means ± SEM, n = 3. *p < 0.05 compared to control (Ctrl, 0 μM).(b) The expression of E-cadherin, vimentin, PCNA, caspase-3, and cleaved-caspase-3 was analyzed by western blotting in cisplatin-treated cells (43.8 μM) or control (Ctrl, 0 μM). (c) Migration was assessed following mechanical wound healing. Cell migration was evaluated at 12 h after treatment with 43.8μM cisplatin.

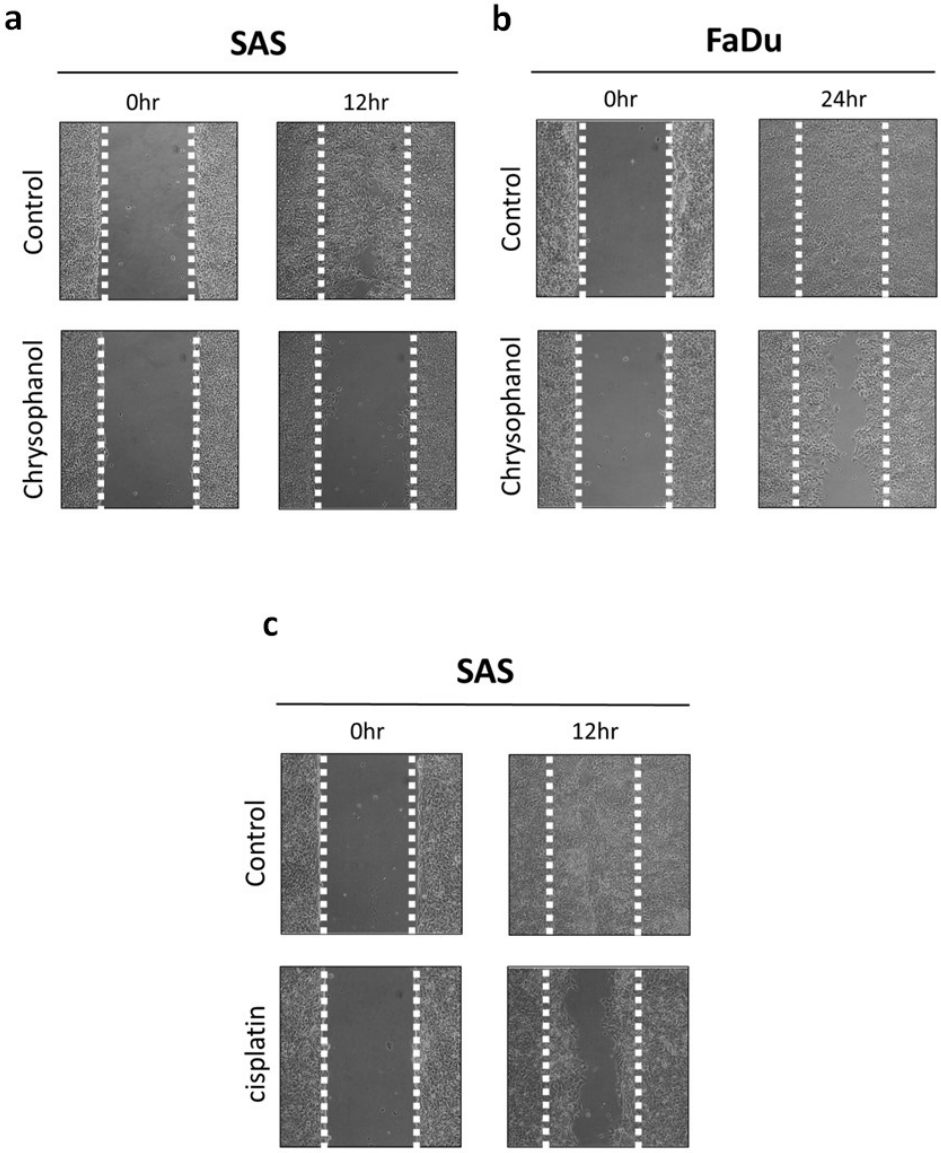
Supplementary figure 6

Supplementary Fig. 6 Chrysophanol inhibits cell migration in a lower concentration.



Migration was assessed following mechanical wound healing in FaDu (a) and SAS (b). Cell migration was evaluated at 12 h or 24h after treatment with 10 μM of chrysophanol or not (Control).

120 Supplementary figure 7



121 **Supplementary Fig. 7** Chrysophanol inhibits cell migration in a lower concentration than
122 IC50. Migration was assessed following mechanical wound healing in FaDu (a) and SAS
123 (b-c). Cell migration was evaluated at 12 h or 24h after treatment with 8 µM of
124 chrysophanol (a-b) or 20 µM of cisplatin (c). Control indicated in absence of chrysophanol or
125 cisplatin.
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