

Figure S1

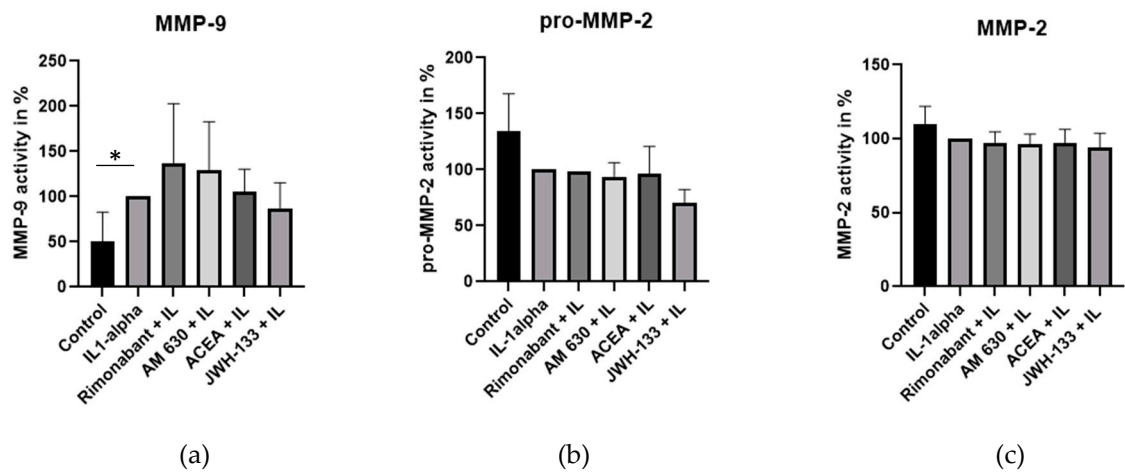


Figure S1. Effect of Rimonabant, AM630, ACEA and JWH-133 on IL-1 $\alpha$  induced secretion of MMP-9 (a), proMMP-2 (b) and MMP-2 (c) in H9c2 cells, 48h after treatment. The graphs represent the densitometric analysis (mean  $\pm$  SD;  $n$  =5–9 for MMP-9 and MMP-2, pro-MMP-2 (Rimonabant  $n$  =1; Control, IL1-alpha  $n$  =2; ACEA, JWH-133, AM 630  $n$  =3). Statistical analysis performed with t-test with Welchs correction, \* $p$  < 0.05.

Figure S2

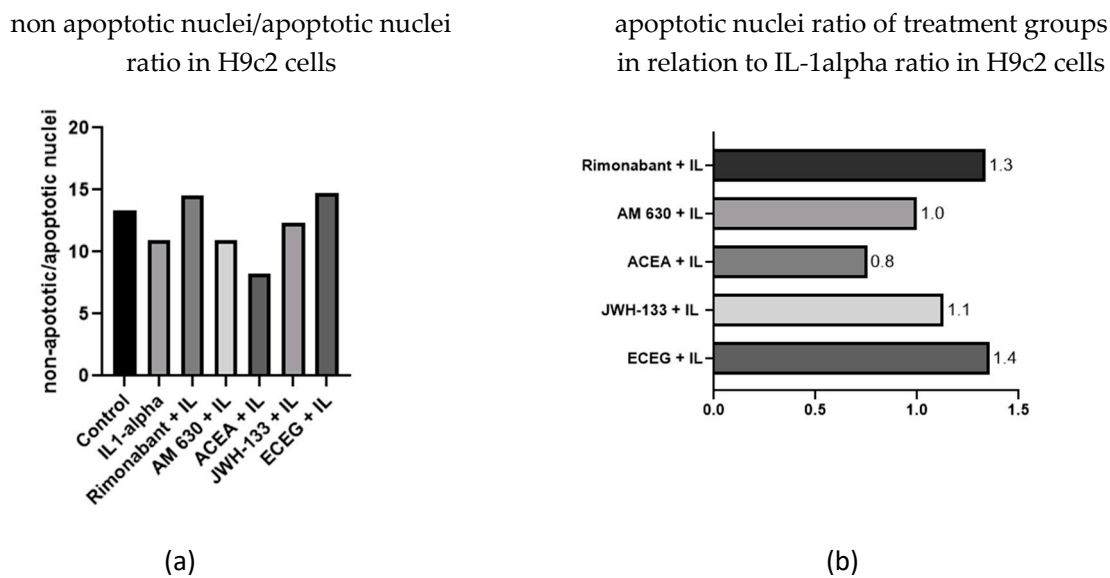
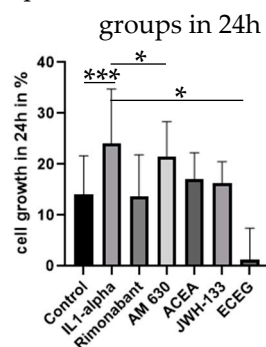


Figure S2. (a) The ratio of non-apoptotic normal cell nuclei to apoptotic cell nuclei in H9c2 cells 48 h after stimulation with IL-1 $\alpha$  (b) The non-apoptotic/apoptotic cell nuclei ratio in relation to IL-1 $\alpha$  stimulation. Treatment groups with a ratio over 1.0 have more normal cell nuclei than those in the IL-1 $\alpha$  group.

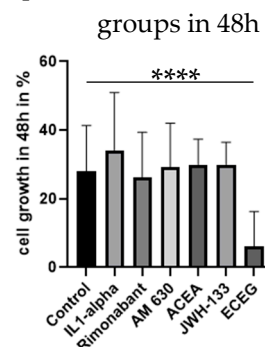
**Figure S3**

cell growth of VSMC in 10% FBS without  
IL1-alpha stimulation in the treatment



(a)

cell growth of VSMC in 10% FBS without  
IL1-alpha stimulation in the treatment

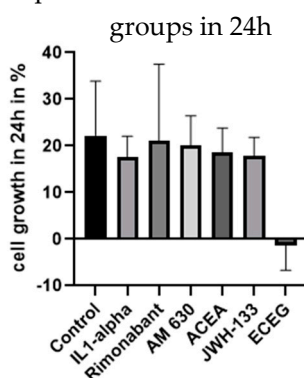


(b)

Figure S3. The growth rate (confluence difference) of VSMCs estimated by IncuCyte live-cell analysis after treatment with compounds without IL-1 $\alpha$  stimulation in the treatment groups in 24 h (a) and 48 h (b). Statistical testing was performed using unpaired t-tests between treatment and control group. Significance was expressed when  $p < 0.05$ ;  $n = 5-32$  (\* $p < 0.05$ ; \*\*\* $p < 0.01$ ; \*\*\*\* $p < 0.001$ ).

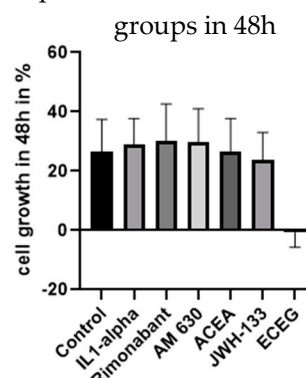
**Figure S4**

cell growth of H9c2 cells in without  
IL1-alpha stimulation in the treatment



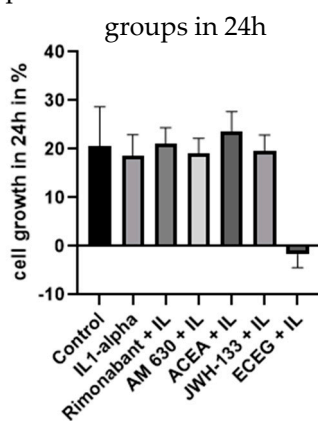
(a)

cell growth of H9c2 cells in without  
IL1-alpha stimulation in the treatment



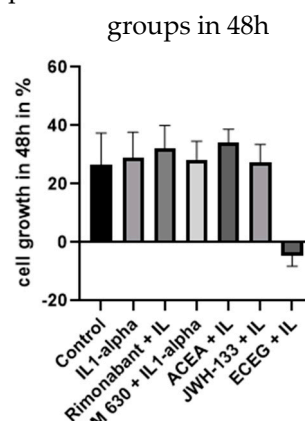
(b)

cell growth of H9c2 cells in with IL1-  
alpha stimulation in the treatment

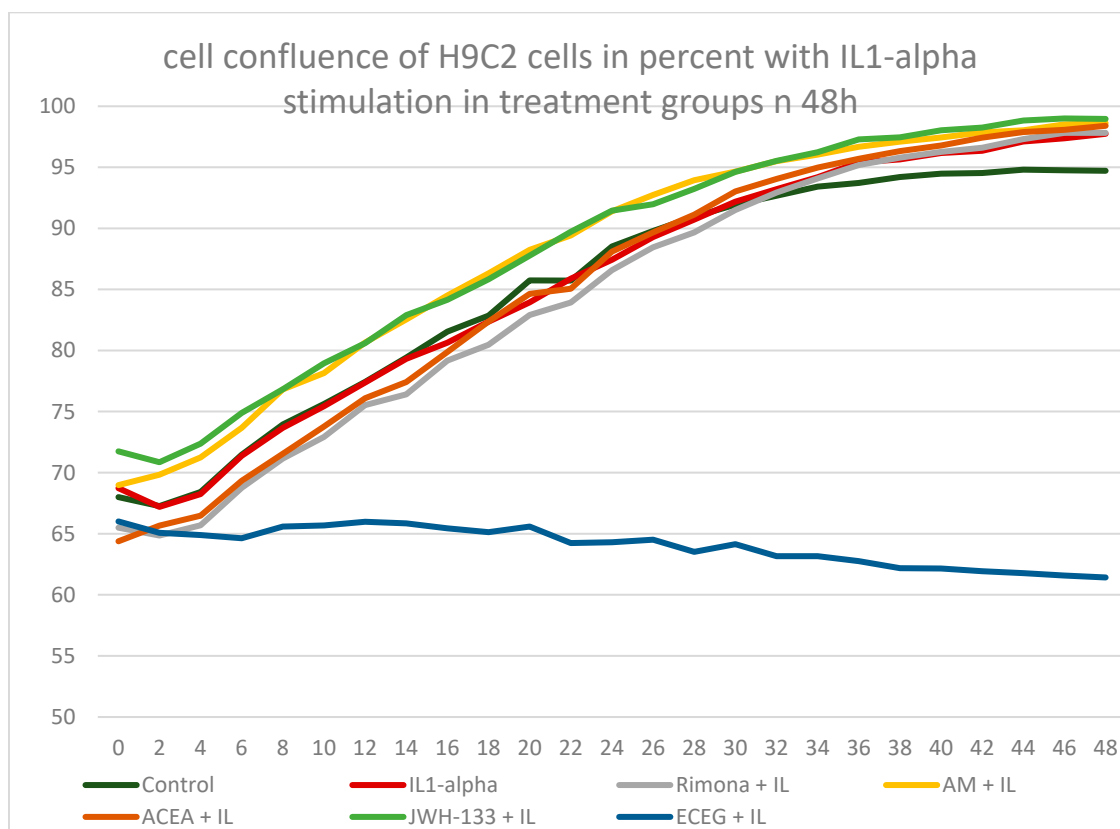


(c)

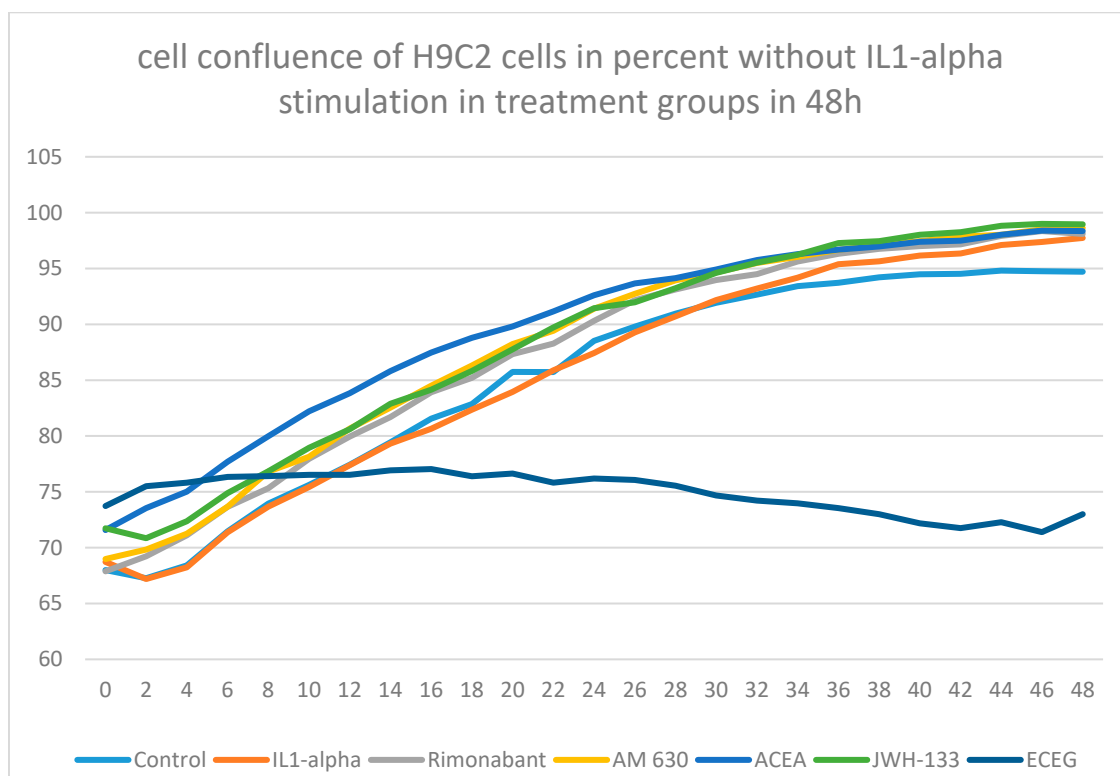
cell growth of H9c2 cells in with IL1-  
alpha stimulation in the treatment



(d)



(e)

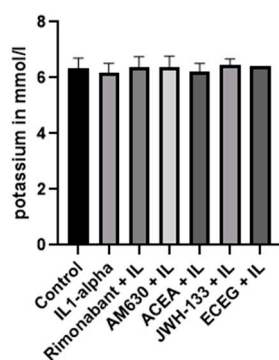


(f)

Figure S4. The growth rate (confluence difference) of H9c2 cells estimated by IncuCyte live-cell analysis after treatment with compounds without IL-1 $\alpha$  stimulation in 24 h (a) and 48 h (b) and with IL1-alpha stimulation in 24 h (c) and 48 h (d). (e) and (f) H9c2, cell growth in dynamic. Representative graph obtained from IncuCyte Live Cell Analysis System. Cell proliferation was monitored by analysing the occupied area (% confluence) of cell images over 48 h. Analysis of the IncuCyte images was performed with Incucyte® Analysis Software. The experiment was performed using 10% FBS medium with (f) and without (e) IL-1 $\alpha$  stimulation in all treatment groups.

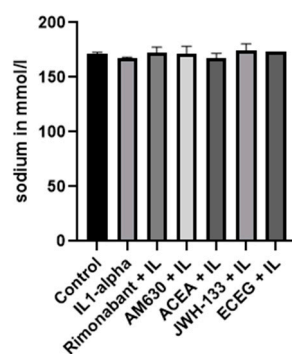
**Figure S5**

potassium levels in supernatant  
of H9c2 cells



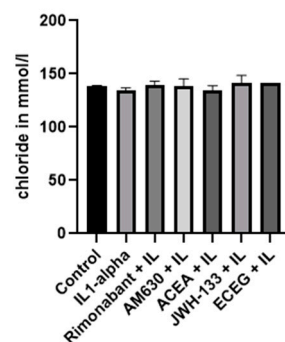
(a)

sodium levels in supernatant  
of H9c2 cells



(b)

chloride levels in supernatant  
of H9c2 cells



(c)

Figure S5. The concentrations of potassium (a), sodium (b) and chloride (c), measured in cell supernatant of H9c2 cells 48 h after treatments with compounds and IL-1 $\alpha$  stimulation.