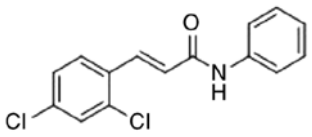
Figure S1. Chemical structure of NED416, also known as (*E*)-3-(2,4-dichlorophenyl)-*N*-phenylacrylamide.



(*E*)-3-(2,4-Dichlorophenyl)-*N*-phenylacrylamide (NED416)

Figure S2. 13C-NMR spectrum of NED416, also known as (*E*)-3-(2,4-dichlorophenyl)-*N*-phenylacrylamide.

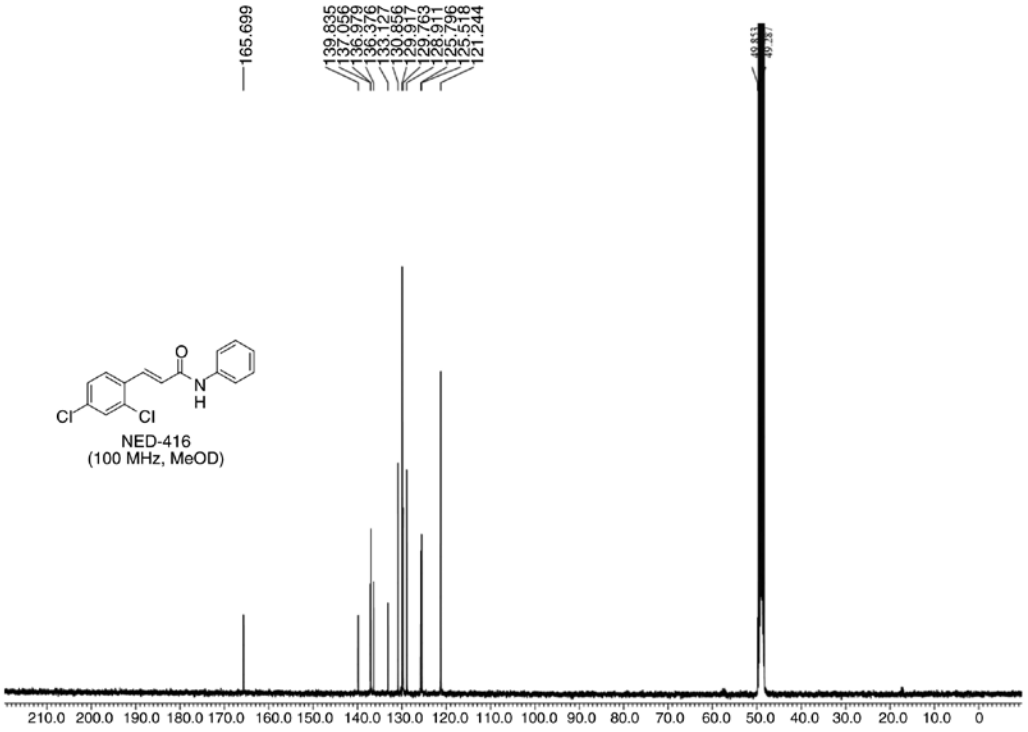


Figure S3. Effect of NED416 on the viability of NHDF and HaCaT cells. (A) NHDF cells treated with NED416 for 72 h exhibited minimal reductions in cell viability up to a concentration of 10 μM. (B) HaCaT cells treated with NED416 similarly exhibited minimal reductions in cell viability up to a concentration of 10 μM. Data are presented as the mean ± SEM. NED416, (*E*)-3-(2,4-dichlorophenyl)-*N*-phenylacrylamide.

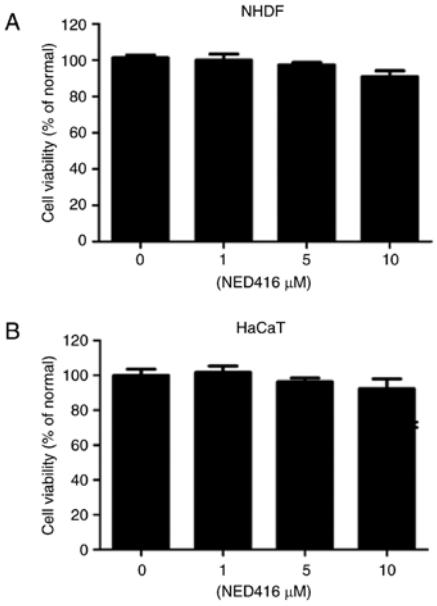
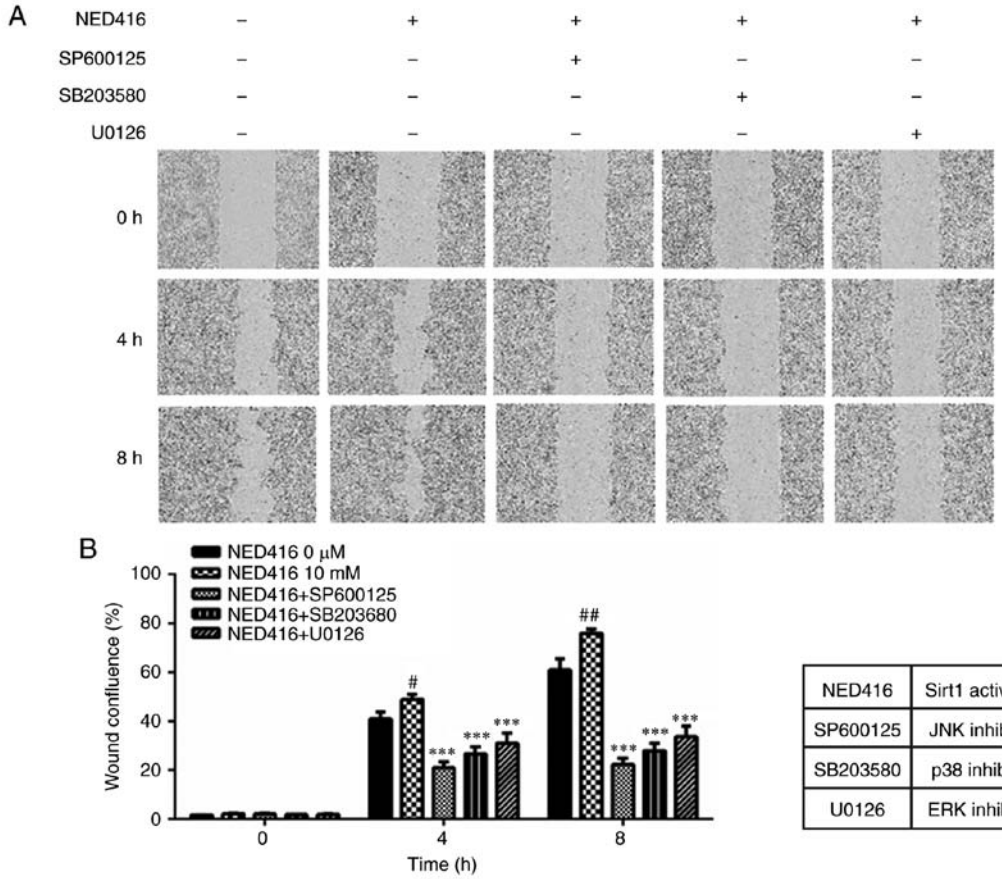


Figure S4. Blocking MAPK signaling proteins inhibits Sirt1-mediated cell migration. (A) HaCaT cells treated with 10 μM NED416 exhibited a higher rate of migration than control cells. Selective inhibition of the MAPK signaling proteins JNK, p38 or ERK using 10 μM SP600125, SB203580 or U0126, respectively, reverted the increased cell migration induced by NED416 treatment to control levels. (B) Graphical representation of the inhibitory effects of MAPK inhibitors on NED416-mediated cell migration. Data are presented as the mean ± SEM. ***P<0.001 vs. 10 μM NED416; $^{\#}$P<0.05, $^{\#\#}$P<0.01 vs. control. NED416, (*E*)-3-(2,4-dichlorophenyl)-*N*-phenylacrylamide; MAPK, mitogen-activated protein kinase; Sirt1, sirtuin 1.



NED416	Sirt1 activator	10 μM
SP600125	JNK inhibitor	10 μM
SB203580	p38 inhibitor	10 μM
U0126	ERK inhibitor	10 μM