

Adhesion glycoprotein CD44 functions as an upstream regulator of a network connecting ERK, AKT and Hippo-YAP pathways in cancer progression

Supplementary Material

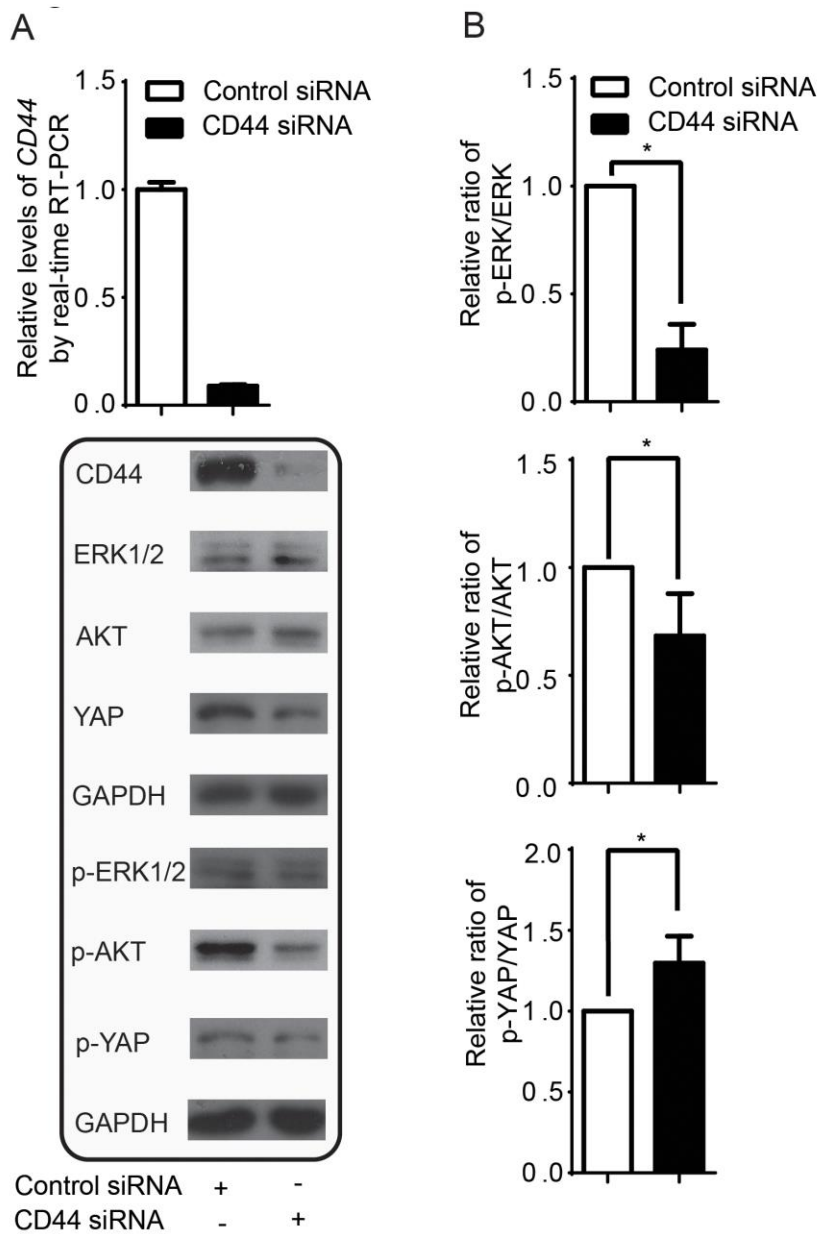


Figure S1: CD44 functions as an upstream regulator of AKT, ERK and Hippo-yap in

BT549. * $p < 0.05$

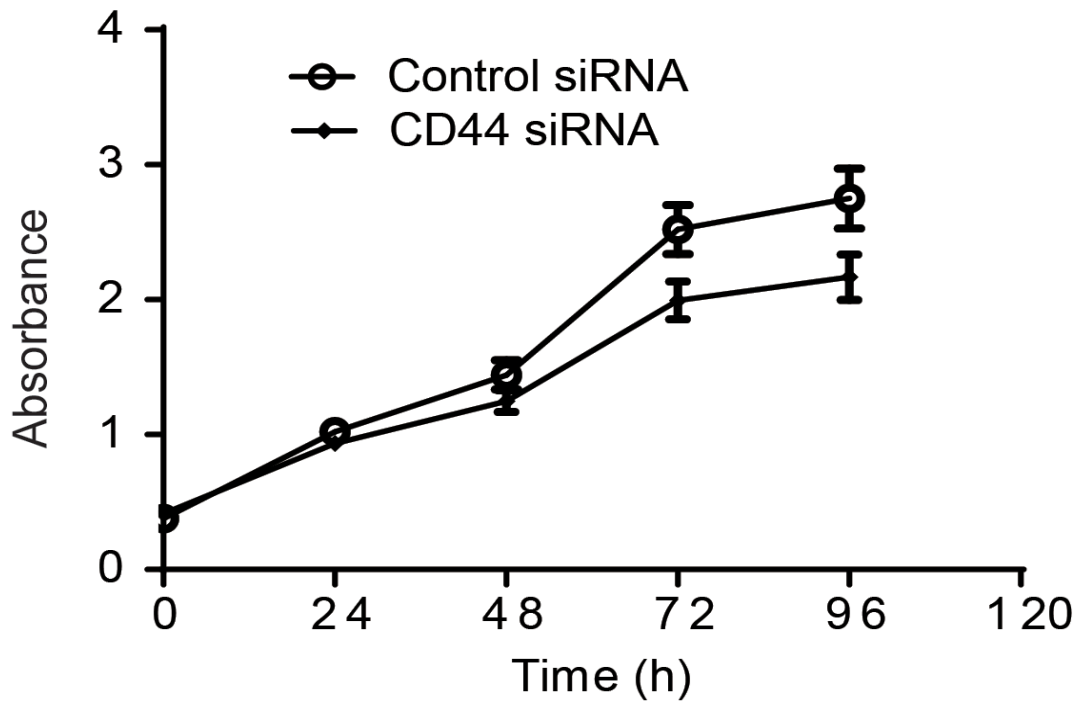


Figure S2: Silencing CD44 decreased the proliferation of BT549.

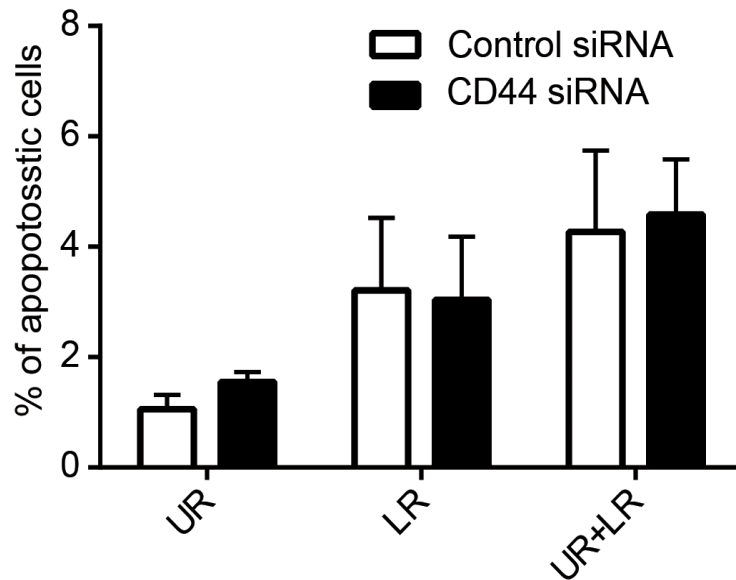


Figure S3: CD44 silencing had little effect on MDA-MB-435s cell apoptosis in cell culture with sufficient nutrition.

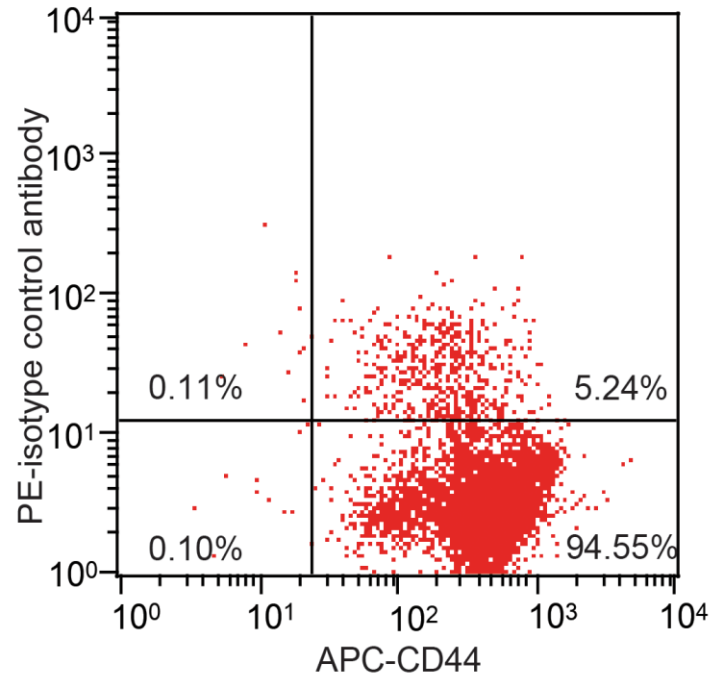


Figure S4: Almost all MDA-MB-435s cells are CD44⁺.

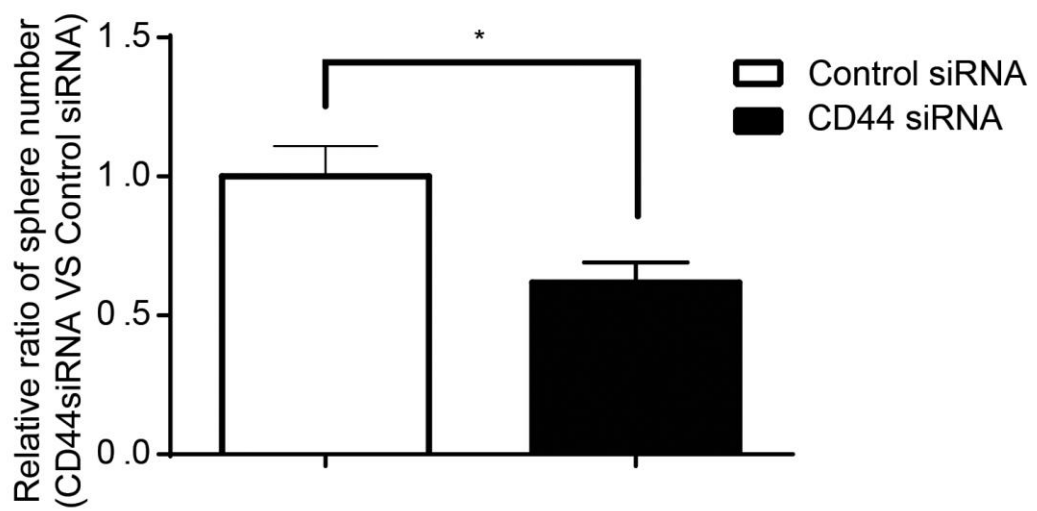


Figure S5: Silencing CD44 leads to decrease of tumorsphere number.

Supplementary Table 1. Real-time RT-PCR primers

| Real-time RT-PCR primer | Sequence(5'-3') | Real-time RT-PCR primer | Sequence(5'-3') |
|-------------------------|---------------------------|-------------------------|----------------------------|
| <i>Gapdh</i> -RT-F | AGAAGGCTGGGGCTCATTTG | <i>CD44</i> -RT-F | GGTACATCTTTTACACCTTTTCTAC |
| <i>Gapdh</i> -RT-R | AGGGGCCATCCACAGTCTTC | <i>CD44</i> -RT-R | GAATGTGTCTTGGTCTCTGGTAG |
| <i>Pena</i> -RT-F | TGGAGAACTTGAAATGGAAA | <i>Ki67</i> -RT-F | TCCTTTGGTGGGCACCTAAGACCTG |
| <i>Pena</i> -RT-R | GAACTGGTTCATTCATCTCTATGG | <i>Ki67</i> -RT-R | TGATGGTTGAGGTCGTTCCCTTGATG |
| <i>Sod2</i> -RT-F | TCCAAGGGAAACACTCGGCTTT | <i>Faslg</i> -RT-F | GCAGCCCTTCAATTACCCAT |
| <i>Sod2</i> -RT-R | AAACCACTGGGTGACATCTACCAGA | <i>Faslg</i> -RT-R | CAGAGGTTGGACAGGGAAGAA |
| <i>Inhba</i> -RT-F | GCAGTCTGAAGACCACCCTC | <i>Cyr61</i> -RT-F | ACTTCATGGTCCCAGTGCTC |
| <i>Inhba</i> -RT-R | ATGATCCAGTCATTCCAGCC | <i>Cyr61</i> -RT-R | AAATCCGGGTTTCTTTTACA |
| <i>Ankrd1</i> -RT-F | AAGCAGGAGGATCTGAAGACACTT | <i>Ctgf</i> -RT-F | TGGAGATTTTGGGAGTACGG |
| <i>Ankrd1</i> -RT-R | GTTGTTTCTCGCTTTTCCACTGT | <i>Ctgf</i> -RT-R | CAGGCTAGAGAAGCAGAGCC |
| <i>Akt1</i> -RT-F | TGAAGGTGCCATCATTCTTG | <i>CyclinD1</i> -RT-F | GGCGGATTGGAAATGAACTT |
| <i>Akt1</i> -RT-R | ATGAGCGACGTGGCTATTGT | <i>CyclinD1</i> -RT-R | TCCTCTCCAAAATGCCAGAG |
| <i>CyclinE2</i> -RT-F | GCCAGACTTCTTTTGACATCCT | <i>Cdk1</i> -RT-F | TCCCTCCTGGTCAGTACATGG |
| <i>CyclinE2</i> -RT-R | TACAAGCTAAGCAGCAGCCC | <i>Cdk1</i> -RT-R | ACAAAACACAATCCCCTGTAGG |
| <i>Nanog</i> -RT-F | GGTGTGACGCAGAAGGCCTCA | <i>Sox2</i> - RT-F | GGGGAAAGTAGTTTGCTGCC |
| <i>Nanog</i> - RT-R | CCCAGTCGGGTTACCAGGCA | <i>Sox2</i> - RT-R | CGCCGCCGATGATTGTTATT |
| <i>Occt4</i> - RT-F | GGCTCGAGAAGGATGTGGTCCG | <i>KLF4</i> - RT-F | CGAACCCACACAGGTGAGAA |
| <i>Occt4</i> - RT-R | GGGCTCCCATAGCCTGGGGT | <i>KLF4</i> - RT-R | GAGCGGGCGAATTTCCAT |
| <i>Cdkn1a</i> -RT-F | GGCAGACCAGCATGACAGATT | | |
| <i>Cdkn1a</i> -RT-R | GCGGATTAGGGCTTCTCT | | |