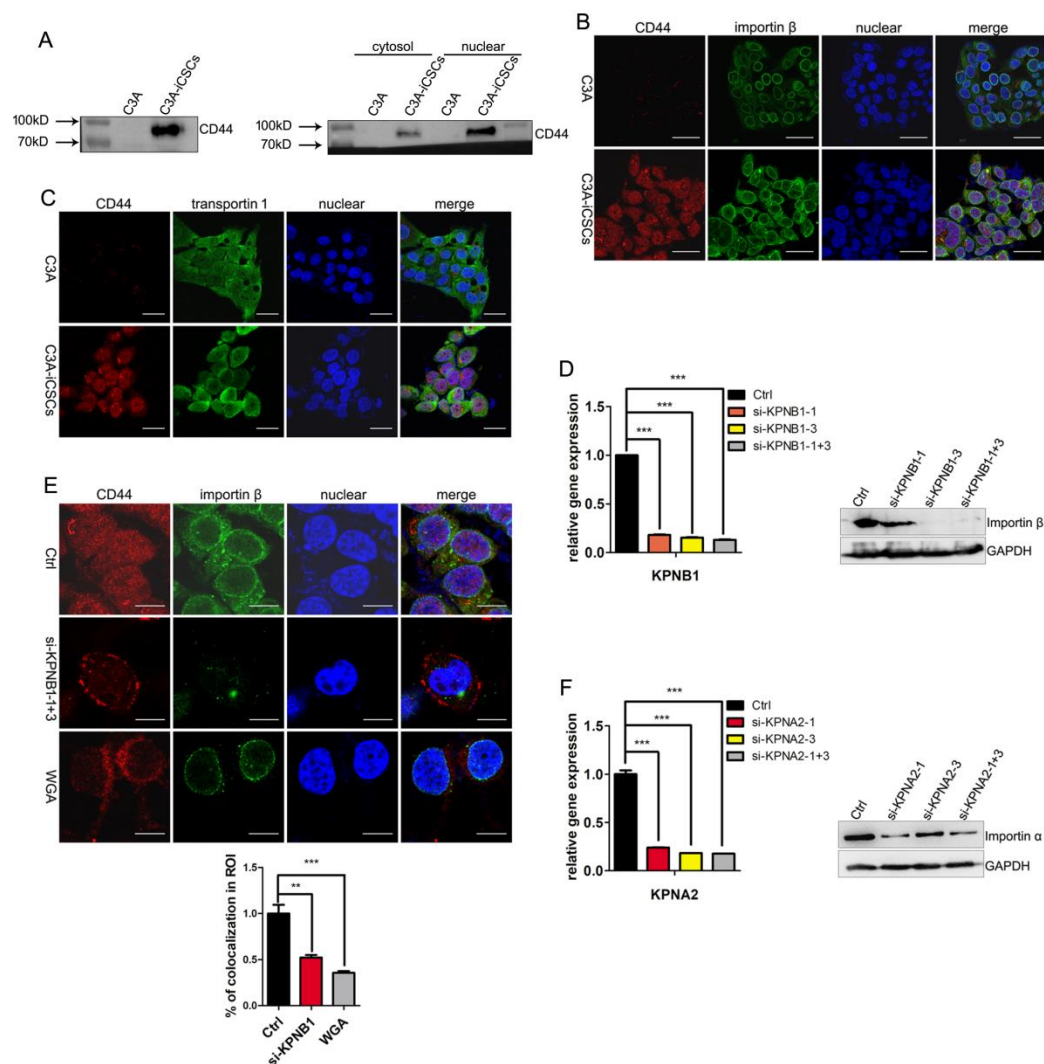


## Supplementary materials



**Figure S1**

**A.** Molecular weight of CD44 is shown in kilo Daltons. **B.** Immunofluorescence staining analysis of CD44 (red) and importin  $\beta$  (green) in C3A cells and C3A-iCSCs. Scale bar, 25  $\mu$ m. **C.** Immunofluorescence staining analysis of CD44 (red) and transportin 1 (green) in C3A cells and C3A-iCSCs. Scale bar, 25  $\mu$ m. **D.** Real-time PCR assay and Western blot assay were performed to confirm the efficiency of siRNA-mediated downregulation of *KPNB1*. **E.** Immunofluorescence staining analysis of CD44 and importin  $\beta$  after importin  $\beta$  was knocked down by RNA interference assay. Percentages of colocalization in ROI were qualified (lower). Scale bar, 10  $\mu$ m. **F.** Real-time PCR assay and Western blot assay were performed to confirm the efficiency of siRNA-mediated downregulation of *KPNA2*.

**Table S1: primers used for real-time PCR, Chip-qPCR and luciferase assay**

Gene symbol	Forward/Reverse primers	Primer sequences 5'-3'
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<i>OCT4</i>	F	GGGAGATTGATAACTGGTGTGTT
	R	GTGTATATCCCAGGGTGATCCTC
<i>SOX2</i>	F	GGGAAATGGGAGGGGTGAAAAGAGG
	R	TTGCGTGAGTGTGGATGGGATTGGTG
<i>NANOG</i>	F	CTAAGAGGTGGCAGAAAAACA
	R	CTGGTGGTAGGAAGAGTAAAGG
exo <i>Oct4</i>	F	ACATCGCCAATCAGCTTGG
	R	AGAACCATACTCGAACCACATCC
exo <i>Sox2</i>	F	ACAGATGCAACCGATGCACC
	R	TGGAGTTGTACTGCAGGGCG
exo <i>Klf4</i>	F	GGCTGGAGATGTTGAGAGCAA
	R	AAAGGAAATCCAGTGGCGC
exo <i>c-Myc</i>	F	GACGTGGAGGAAAATCCCG
	R	ATGTCAGACTCGCCAGGTG
<i>GBX2</i>	F	CCGCCTTCAGCATAGACTCG
	R	GGTAGCCGGTGTAGACGAAAT
<i>DNMT3L</i>	F	TACGACCGAGAGTCGGAGAAT
	R	GCCCAAACCTCGTCAGCTCTTT
<i>KLF2</i>	F	CTACACCAAGAGTTCGCATCTG
	R	CCGTGTGCTTTCGGTAGTG
<i>KLF5</i>	F	CCTGGTCCAGACAAGATGTGA
	R	GAACTGGTCTACGACTGAGG
<i>GAPDH</i>	F	GGAAGGTGAAGGTCGGAGTCA
	R	GTCATTGATGGCAACAATATCCACT
<i>ZFP42</i>	F	GCCTTATGTGATGGCTATGTGT
	R	ACCCCTTATGACGCATTCTATGT
<i>ESRRB</i>	F	TCGCTGCCCTATGACGACA
	R	CTTCTTGTACCTGCGTACCAG
<i>DPPA4</i>	F	GACCTCCACAGAGAAGTCGAG
	R	TGCCTTTTTCTTAGGGCAGAG
<i>E-Cadherin</i>	F	TGCCCAGAAAATGAAAAAGG
	R	GTGTATGTGGCAATGCGTTC
<i>N-Cadherin</i>	F	ACAGTGGCCACCTACAAAGG
	R	CCGAGATGGGGTTGATAATG
<i>VIMENTIN</i>	F	GAGAACTTTGCCGTTGAAGC

	R	GCTTCCTGTAGGTGGCAATC
<i>TWIST1</i>	F	GGAGTCCGCAGTCTTACGAG
	R	TCTGGAGGACCTGGTAGAGG
<i>SLUG</i>	F	GACTACCGCTGCTCCATT
	R	GAGGAGGTGTCAGATGGA
<i>CD44</i>	F	CTGCCGCTTTGCAGGTGTA
	R	CATTGTGGGCAAGGTGCTATT
<i>LIFR</i>	F	TGGAACGACAGGGGTTTCAGT
	R	GAGTTGTGTTGTGGGTCCTAA
Chip <i>KLF2</i>	F	GGTCCCCGGGATGCTC
	R	CCGGGCGCAGCCTAAA
Chip <i>KLF5</i>	F	ATCCTGGCAGAGAACAGTGC
	R	TGACAGATTGGGCTGGCG
Chip <i>ESRRB</i>	F	GAGCCTTCTTGCCCCAGTAAT
	R	TTGAATTTGGGGGTGTGGAGT
<i>KLF5</i> promoter (luciferase)	F	GGGGTACCGGGGCTGCTTGGTTAGAGAA
	R	CCCAAGCTTCCGCGACTACTGACACTTGA
<i>ESRRB</i> promoter (luciferase)	F	GGGGTACCGCCATTGCTGACCATGGGAT
	R	CCCAAGCTTTGGATCACCTCTGGCCTCAA