

**Figure S1. Yap expression during decidualization.** (A) and (B) Real-time PCR and western blot analyses of Yap expression in mice uteri on days 1-8 of pregnancy (3 mice per group). (C) and (D) Yap mRNA and protein expression in decidual and stromal cells (3 mice per group). (E) and (F) Yap mRNA and protein expression under artificial decidualization (3 mice per group). Data are shown mean  $\pm$  SEM, Asterisks denote significance (P < 0.05).

**Figure S2** 



Figure S2. Yap mRNA and protein levels as well as Yap-Tead transcriptional activity in stromal cells after treatment with Yap siRNA or Verteporfin. (A-C) Yap mRNA and protein levels (N = 3 per group) as well as Yap-Tead transcriptional activity (N = 5 per group) in stromal cells after introduction of Yap siRNA. (D) Effect of Yap inhibitor Verteporfin on Yap-Tead transcriptional activity (N = 5 per group).

Figure S3



Figure S3. Rrm2 mediated the effect of Bmp2 on stromal differentiation. (A) and (B) Rrm2 mRNA and protein expression was evaluated after introduction of Rrm2 overexpression plasmid (N = 3 per group). (C) and (D) Rrm2 mRNA and protein expression was evaluated after exposure to rBmp2 with/without Alk2 siRNA (N = 3 per group). (E) and (F) Repression of Rrm2 by Triapine prevented the induction of Bmp2 on *Prl8a2* and *Prl3c1* expression (N = 3 per group) as

well as ALP activity (N = 5 per group).

Sequence of Forward Primer TTAACAGTGGCACCTATCAC	Sequence of Reverse Primer	Application
TTAACAGTGGCACCTATCAC	TCCAAGATTTCGGAACTCAG	
	100/110/01/1000/110/00	In situ hybridization
AAGCTTATGCTCTCCGTCCGCACCCCG	CTCGAGTTAGAAGTCAGCATCCAAGGT	Overexpression
CCGGCGAATTGGAGATGAACT	CCAGCCCATGATGGTTCTGAT	Real-time PCR
TCAGAGCGAGAAGGTAGGGA	CTGTGGGGTAACAAGAAGGTC	Real-time PCR
CTGGACTGTGGCATTGAGAC	GCAAAGGGACTGGATGAACC	Real-time PCR
GCCCGACGTGGATGAGTTT	AGGAGGAATTGGTTGGTGGTT	Real-time PCR
CTGAGCCTGAGCCTGAACCT	AGCCCCATCATCTGCGTCT	Real-time PCR
GCTAGCTCCCAAGGATCGTC	CTGCAGAGCTGAGGGTTCTC	Real-time PCR
GGGATGTGAGGGAAGAGGTGA	GCAGCGAAAACAACGTGAAA	Real-time PCR
CCTCCTACTTCCAGTGCGTG	GGCAGACGGTACCTAGAAGC	Real-time PCR
AATGGATGGTTCCGTTCGC	TGGGTCTGGATGTTGTGGG	Real-time PCR
CTGGGCACTCCTAACAACGAAG	TCCAAGCCGTTCTCGTCCAG	Real-time PCR
ACAGGGCAAGGTGAAAGAC	AGGAGGACGGCAATGAGG	Real-time PCR
GTGGCTGAAATTGGTGTCGG	TAACAAGGCCACCTCACGAA	Real-time PCR
TCCTGCTCCAGTCCAGCTAT	CCACGTCTGAACTTCCACGA	Real-time PCR
AGCCAGAAATCACTGCCACT	TGATCCATGCACCCATAAAA	Real-time PCR
GCCACACGATATGACCGGAA	GGTTTGGCACATCTTGGTGTT	Real-time PCR
CCTATCACCCTTGCCATCAT	GAGGCTGTTGCTTGTGTGAC	Real-time PCR
ATGGAAAGCCTGCCATCATG	TCCTTGTTGTTCAGCATCAC	Real-time PCR
AGTTCCTCACGGAGGCCTT	CTCTGATACTCGCCTACTCGC	Real-time PCR
CCGTTTCTCCTGGGACACTC	CTGCTGGCAGTGGTACATCA	Real-time PCR
	CTGGACTGTGGCATTGAGAC   GCCCGACGTGGATGAGTTT   CTGAGCCTGAGCCTGAACCT   GCTAGCTCCCAAGGATCGTC   GGGATGTGAGGGAAGAGGTGA   CCTCCTACTTCCAGTGCGTG   AATGGATGGTTCCGTTCGC   CTGGGCACTCCTAACAACGAAG   GTGGCTGAAATTGGTGTCGG   GTGGCTGAAATTGGTGTCGG   GCCACACGATATGACCAGCTAT   AGCCAGAAATCACTGCCATCAT   AGGCAAGCTGCCATCATG   ATGGAAAGCCTGCCATCATG   AGTTCCTCACGGAAGGCCTT   CCGTTTCTCCTGGGACACTC	CTGGACTGTGGCATTGAGACGCAAAGGGACTGGATGAACCGCCCGACGTGGATGAGTTTAGGAGGAATTGGTTGGTGGTTCTGAGCCTGAGCCTGAACCTAGCCCCATCATCTGCGTCTGCTAGCTCCCAAGGATCGTCCTGCAGAGCGAAGACGGGAACGGGATGTGAGGGAAGAGGTGAGCAGCGAAAACAACGTGAAACCTCCTACTTCCAGTGCGTGGGCAGACGGTACCTAGAAGCAATGGATGGTTCCGTTCGCTGGGTCTGGATGTTGTGGGCTGGGCACTCCTAACAACGAAGTCCAAGCCGTTCTCGTCCAGACAGGGCAAGGTGAAAGACAGGAGGACGGCAATGAGGGTGGCTGAAATTGGTGTCGGTAACAAGGCCACCTCACGAATCCTGCTCCAGTCCAGCTATCCACGTCTGAACTTCCACGAAGCCAGAAATCACTGCCACTTGATCCATGCACCCATAAAAGCCACACGATATGACCGGAAGGTTTGGCACATCTTGGTGTTCCTATCACCCTTGCCATCATGAGGCTGTTGCTTGTGTGACATGGAAAGCCTGCCATCATGTCCTTGTTGTTCAGCATCACAGTTCCTCACGGAGGCCTTCTCTGATACTCGCCTACTGCCCGTTTCTCCTGGGACACTCCTGCTGGCAGTGGTACATCA

## Table S1. Primers used in this study