

Supplement Table S1

LncRNAs involved in adipogenesis and development

LncRNA	Cell	Function	Year
TINCR	ADSCs	Promote adipogenic differentiation	2018
HoxA11-AS1	ADSCs	Promote adipogenic differentiation	2018
Bmncr	BMSC	Inhibit adipogenesis	2018
Plnc1	BMSC	Promote adipogenic differentiation	2018
Leptin	Primary adipocyte	Promote adipocyte differentiation	2018
AdipoQ AS	Primary adipocyte	Inhibit adipogenesis	2018
OAD	3T3-L1	Promote adipogenic differentiation	2019
CAAInc1	C3H10	Inhibit adipogenesis	2019
ORA	3T3-L1	Promote adipogenesis	2019
lincADAL	ADSCs	Promote adipocyte differentiation	2019
PGC1 β -OT1	ST2	Inhibit adipogenic differentiation	2019
	C3H10		

mouse MSCs			
AC092834.1	ADSCs	Inhibit adipogenic differentiation	2020
PVT1	3T3-L1	Promote adipogenic differentiation	2020
HCG11	hAdMSCs	Inhibit adipogenic differentiation	2020
AD	Preadipocyte in chicken	Inhibit adipogenesis	2020
Adi	ADSCs	Promote adipogenic differentiation	2020
MALAT1	C3H10	Promote adipogenesis	2021
LYPLAL1-AS1	ADSCs	Promote adipogenic differentiation	2021
13728	ADSCs	Promote adipogenic differentiation	2021
FR332443	3T3-L1	Inhibit adipogenic differentiation	2021
SAMM50	Buffalo Adipocytes	Promote adipogenic differentiation	2021
RAP2	Preadipocytes	Promote adipogenesis	2022
LIPE-AS1	OP9	Promote adipogenic	2022

		differentiation	
MIR99AHG	3T3-L1	Promote adipocyte	2022
		differentiation	
NR.015556	3T3-L1	Inhibit adipocyte	2022
	C3H10	differentiation	
NEAT1	BMSC	Promote adipogenic	2022
		differentiation	
ACART	3T3-L1	Promote adipocyte	2023
		differentiation	
PLAAT3	Porcine	Promote adipocyte	2023
	primary	differentiation	
	adipocyte		
BIANCR	Intramuscular	Promote adipogenesis	2023
	preadipocytes		
	in cattle		

Supplement Table S2**MiRNAs involved in adipogenesis and development**

MiRNA	Cell	Function	Year
miR-220a	Yak adipocytes	Promote adipocyte differentiation	2018
miR-23a/27a/24-2 cluster	Bovine adipocytes	Inhibit adipogenesis	2018
miR-27b	3T3-L1	Promote adipocyte differentiation	2019
miR-425	3T3-L1	Promote adipocyte differentiation	2019
miR-130a	BMSCs	Inhibit adipogenic differentiation	2019
miR-16-5p	3T3-L1	Promote adipocyte differentiation	2019
miR-18b-3p	Chicken adipocytes	Inhibit adipocyte differentiation	2019
miR-204	3T3-L1	Promote adipocyte differentiation	2019
miR-107	SGBS	Inhibit adipogenesis	2019
miR-340-5p	Sheep	Inhibit adipocyte	2020

	adipocytes	differentiation	
miR-196b-5p	C3H10	Promote	2020
	ST2	adipogenesis	
	BMSCs		
miR-324-5p	Mouse	Promote adipocyte	2020
	adipocytes	differentiation	
miR-451	Porcine	Inhibit adipogenic	2020
	primary	differentiation	
	adipocyte		
miR-345-5p	3T3-L1	Inhibit adipocyte	2020
		differentiation	
miR-22	3T3-L1	Promote adipocyte	2021
		differentiation	
miR-148a	BMSCs	Promote adipogenic	2021
		differentiation	
miR-222/221	3T3-L1	Promote	2021
		adipogenesis	
miR-370-3p	3T3-L1	Inhibit adipocyte	2021
		differentiation	
miR-410-3p	White	Inhibit	2021
	preadipocyte	adipogenesis	
miR-669a-5p	C3H10	Promote adipocyte	2022

	3T3-L1	differentiation	
miR-23b	Porcine	Promote adipocyte	2022
	preadipocyte	differentiation	
miR-140	3T3-L1	Promote adipocyte	2022
		differentiation	
miR-214	Duck	Promote adipocyte	2022
	adipocyte	differentiation	
miR-26a-5p	Porcine	Inhibit adipocyte	2023
	preadipocyte	differentiation	
miR-33a	Bovine	Inhibit adipocyte	2023
	adipocytes	differentiation	

Supplement Table S3**CircRNAs involved in adipogenesis and development**

CircRNA	Cell	Function	Year
circArhgap5-2	Primary mouse	Promote	2019
	adipocyte	adipogenesis	
circFUT10	Bovine	Inhibit adipocyte	2020
	adipocyte	differentiation	
circ PLXNA1	Duck	Promote adipocyte	2020
	adipocyte	differentiation	
circFLT1	Bovine	Promote adipocyte	2020
	adipocyte	differentiation	
circH19	hADSC	Inhibit adipogenic	2020
		differentiation	
circSAMD4A	preadipocyte	Promote adipocyte	2020
		differentiation	
circCDR1as	BMSC	Promote adipogenic	2020
		differentiation	
circHIPK3	HEPG2	Promote adipose	2020
		deposition	
circPTK2	Mouse white	Inhibit	2021
	preadipocyte	adipogenesis	
circATXN2	Rat ADSC	Promote	2021

		adipogenesis	
circPPAR γ	Bovine	Promote adipocyte	2022
	adipocyte	differentiation	
circBDP1	Bovine	Promote adipocyte	2022
	adipocyte	differentiation	
circMARK3	3T3-L1	Promote adipocyte	2022
	Buffalo adipocyte	differentiation	
circ0006511	Goat intramuscular	Promote adipocyte	2022
	adipocyte	differentiation	
circRNF111	Bovine	Promote adipocyte	2023
	adipocyte	differentiation	
circITGB1	Sheep	Inhibit adipocyte	2023
	adipocyte	differentiation	
circADAMTS16	Bovine	Inhibit adipocyte	2023
	adipocyte	differentiation	
circRBM23	MSCs	Inhibit adipogenic	2023
		differentiation	

*ADSCs: Adipose-derived stem cells; BMSCs: Bone marrow mesenchymal stem cells; ST2, OP9: Murine bone marrow stromal cells; C3H10: Murine mesenchymal stem cell; MSCs: Mesenchymal stromal cells; hAdMSCs: Human adipose-derived mesenchymal stem cells; SGBS: human preadipocytes; HEPG2: Human hepatocellular carcinoma cells.