

Table S1: The list of primary and secondary antibodies used in this study

Serial	Antibody name	Host/Isotype	Type	Reference
1	beta Actin Control Antibody	Mouse/ IgG2b	Primary Antibody	Invitrogen (MA5-15739)
2	Goat Anti mouse	Goat / IgG	Secondary antibody	Invitrogen (31430)
3	Goat Anti Rabbit	Goat / IgG	Secondary antibody	Invitrogen (31460)
4	QK	Rabbit/ IgG	Primary Antibody	Abcam 126742
5	RBMS1	Rabbit/ IgG	Primary Antibody	Abcam150353
6	RBM47	Rabbit/ IgG	Primary Antibody	Abcam 154176
7	CPEB4	Rabbit/ IgG	Primary Antibody	SAB2100474

Table S2: Sequences of the forward and reverse primers for mouse species ordered from Macrogen and used in the quantitative real-time PCR (qRT-PCR).

Gene Name	Forward (5'-3')	Reverse (5'-3')
Actin	ATGACCCAAGCCGAGAAGG	CGGCCAAGTCTTAGAGTTGTTG
Rbm47	AGCCATGAACAGCGATCCAAC	CCGGTGCCTCTATCAGTG
Rbms1	CTGAGCAAGACAAACCTCTACAT	GGCCTTATCCAAAATCGCCTT
Qk	CTGGACGAAGAAATTAGCAGAGT	ACTGCCATTTAACGTGTCATTGT
Qk-7	GCTGCAATAGTCCCTCCAGG	GACTGGCATTTCAATCCACTCTA

Supplementary table S3

RBPs upregulated during differentiation of 3T3-L1 adipocytes or enriched in adipocyte fraction of mouse adipose tissue

Upregulated during differentiated and enriched in adipocyte fraction of adipose tissue Htatsf1 Larp1 Ireb2 Ppargc1a Carhsp1 Csde1 Fmr1 Lsm1 RbmX Taf15 Mcts1 Naa38 Rdm1 Qk Rbm47 Fxr2 Uhmk1 Rbm6 Ppargc1b Akap1 Ybx2 Larp4b Mkrn2 Nsun6 Aco1 Pabpc4 Zcrb1 Msi2 Cpeb3 Thumpd3 Hnrnpa2b1 G3bp2 Tnrc6b Snrpn Rbpms2 Grsf1 Larp1b Mcts2 Thumpd1 Zrsr1
Enriched in adipocyte fraction of adipose tissue Htatsf1 Larp1 Ireb2 Ppargc1a Carhsp1 Csde1 Fmr1 Lsm1 RbmX Taf15 Mcts1 Naa38 Rdm1 Qk Rbm47 Fxr2 Uhmk1 Rbm6 Ppargc1b Akap1 Ybx2 Larp4b Mkrn2 Nsun6 Aco1 Pabpc4 Zcrb1 Msi2 Cpeb3 Thumpd3 Hnrnpa2b1 G3bp2 Tnrc6b Snrpn Rbpms2 Grsf1 Larp1b Mcts2 Thumpd1 Zrsr1
Upregulated during differentiated Rbm39 Srrm1 Lsm11 Spen Trmt1 Cpeb4 Tiparp Ankrd17 Cpeb2 Kin Ankhd1 Zfp36 Rbm15 Tep1 Larp4 Zgpat Zc3h6 Ppp1r10 Nol8 Rbpms Srrm2 Rbm38 Enox2 Rbm18 Setd1a Pabpn1 Synj2 Safb2 Zc3h8

Supplementary table S4

RBP's downregulated during differentiation of 3T3-L1 adipocytes or enriched in SVF fraction of mouse adipose tissue

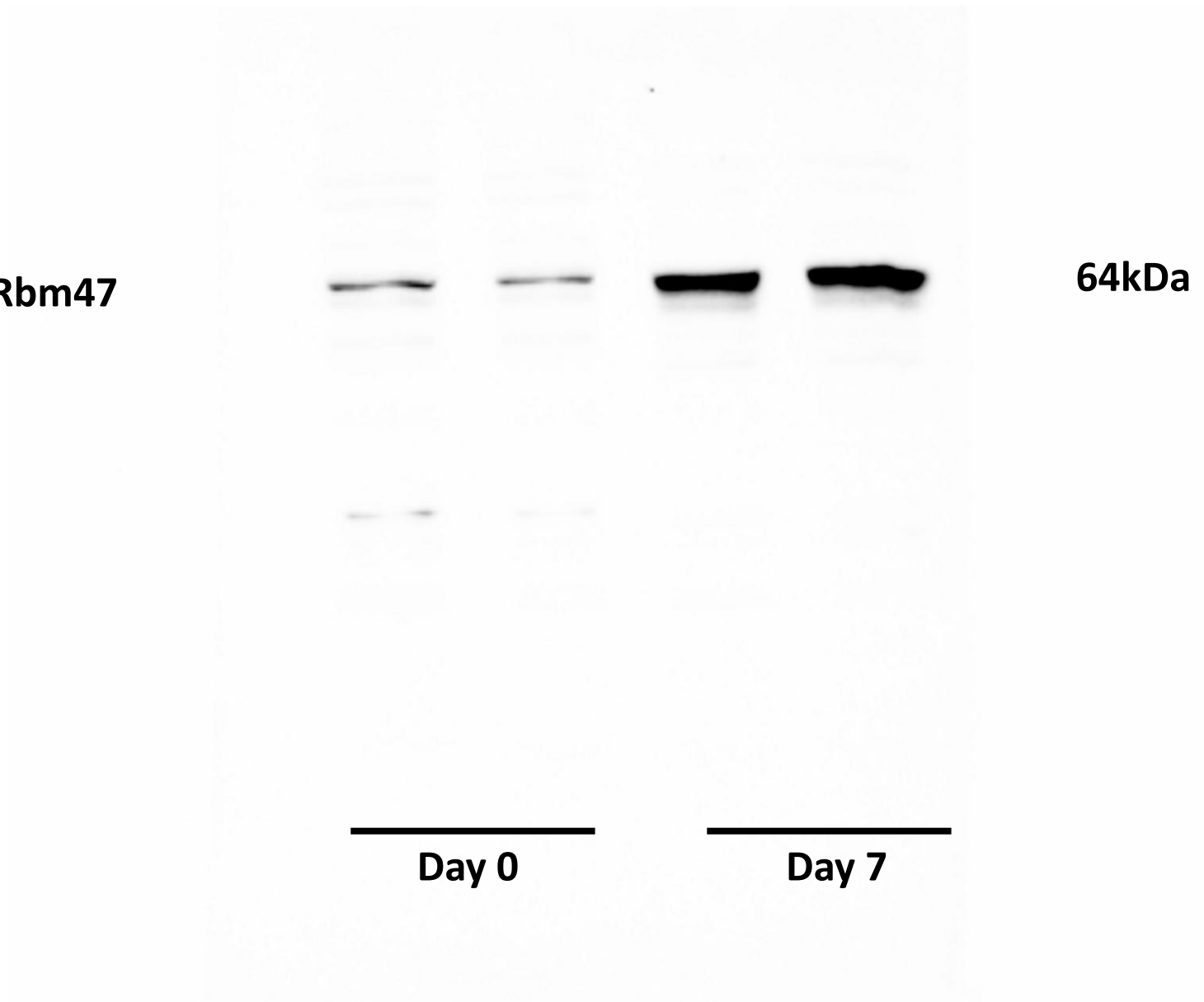
Downregulated during differentiated and enriched in SVF fraction of adipose tissue
Hnrnpd Raver1 Hnrnpa1 Pprc1 Prr3 Acin1 Samd14 Zc3h12a Enox1 Hnrnpa0 Rps3 Csd2 Rbm15b Mex3b Zfp36l1 Larp6 Bicc1 Srrt Zrsr2 Hnrnph1 Rbm22 Zc3hav1 Mex3c Mex3a Slbp Unkl Hnrnpf Zc3h12b Sf3b4 Mex3d Rbms1 Zfp36l2 Zfp239 Tmem63a Igf2bp3 Khdrbs1 Raly Dhx57 Parp14 Zc3hav1l
Enriched in SVF fraction of adipose tissue
Snrpf Upf1 Spen Rbm44 Nova1 Elavl1 Rbm5 Cpsf4l Mkrn1 Dnd1 Msi1 Rcan2 Cpne1 Rbm27 Pabpc6 Ythdc2 Elavl3 Tra2b Pcbp2 Setd1b Nova2 Sfpq Ddx43 Ppp1r10 Pabpn1l Myef2 Ythdc1 Synj1 Eif4b G3bp1 Hnrnpab Rbm38 Ptbp1 Rbm41 Ybx1 Setd1a Sart3 Pabpc2 Zc3h11a Rbm43 Zc3h10 Cpsf4 Rbm24 Khdrbs3 Ythdf1 Esrp2
Downregulated during differentiated
Khsrp Igf2bp2 U2af2 Hnrnpl Pabpc1 Rbm42 Lsm10 Tardbp Poldip3 Ptbp2 U2af1 Igf2bp1 Hnrnpc Fubp3 Nip7 Snrpb Mbnl2 Zc3h4 Hnrnpa3 Snrpg Parp12 Rbm3 Pcbp4 Lsm6 Rrp7a Rbm8a Snrpd3 Sf3a1 Rbms3 Snrpc Nono Pnpt1 Hnrnpr Rbm19 Cherp Lsm3 Puf60 Snrpa Prpf3 Snrpd2 Snrpb2 Hnrnpk Lin28b Samd4 Fubp1 Lsm7 Zc3h7b Larp7

Rbm47

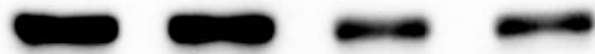
64kDa

Day 0

Day 7



Rbms1

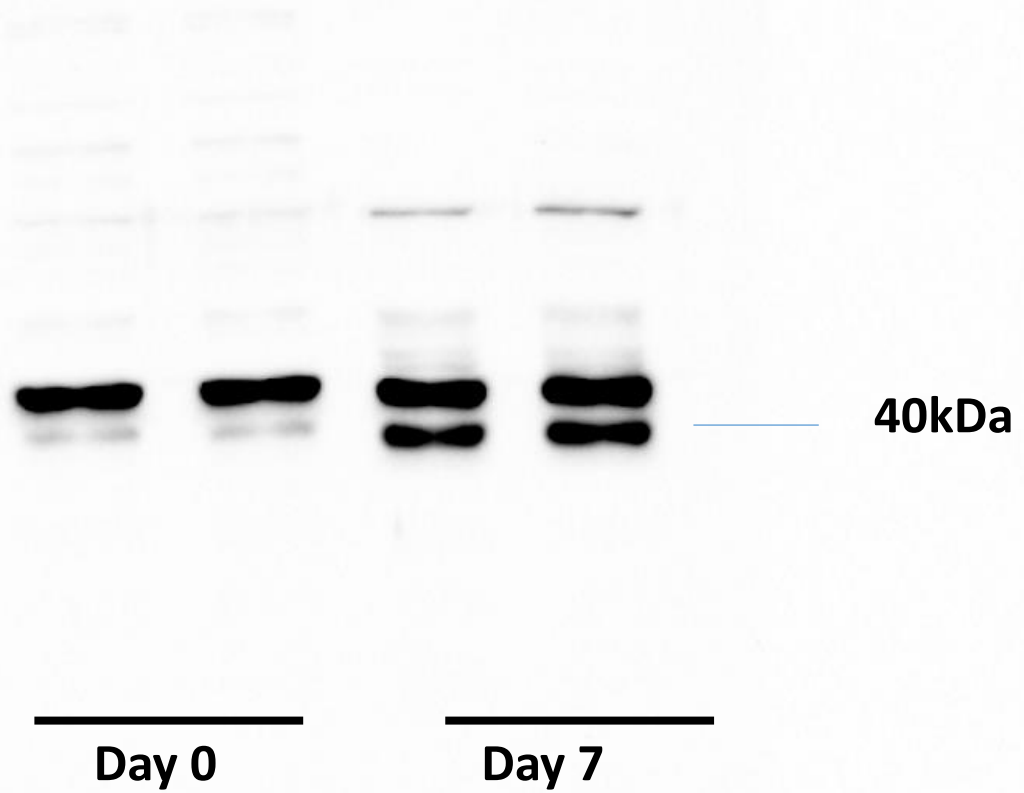


Day 0

Day 7

45kDa

Qk

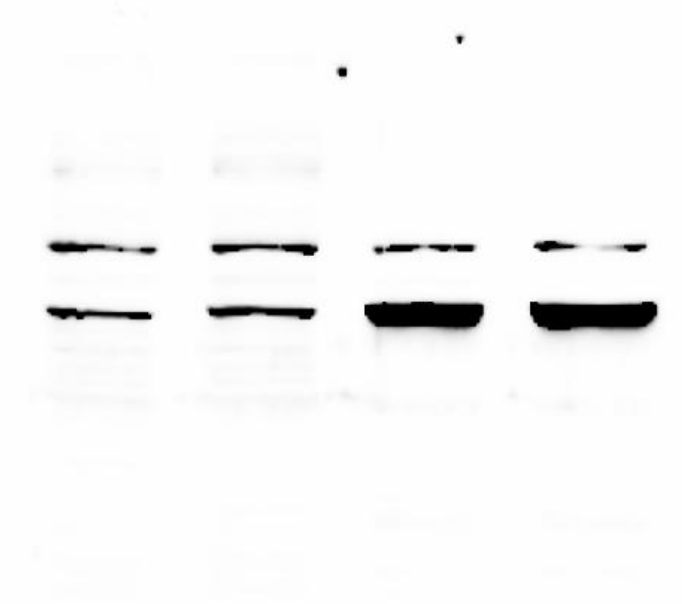


Cpeb4

80kDa

Day 0

Day 7



β -actin



42kDa

Day 0

Day 7