

**Supplementary Table 1. List of top 20 differentially expressed genes between ADSCs EVs and royal jelly-treated ADSCs EVs .**

ADSC EVs vs FDRJ-ADSC EVs		ADSC EVs vs EzRJ-ADSC EVs		ADSC EVs vs FDRJ-ADSC EVs		ADSC EVs vs EzRJ-ADSC EVs	
Upregulated				Downregulated			
SFI1	8.759	4.11	ZSWIM9	-4.686		-4.505	
MICALL2	7.831	4.931	NOTCH2NLA	-4.139		-3.794	
SREBF1	7.486	4.111	HDGFL3	-3.645		-2.256	
MEF2C	6.936	3.553	ZHX3	-3.537		-2.011	
ELN	6.827	6.313	COPZ1	-3.261		-3.58	
GPHN	6.687	5.462	TCEANC2	-3.164		-3.081	
PI16	6.596	8.564	PRSS12	-3.149		-2.256	
STMN2	6.402	3.84	CABIN1	-3.083		-3.159	
CD36	6.362	3.684	ZNF83	-2.976		-2.576	
TDRP	6.212	3.71	UBA6	-2.78		-5.268	
TMEM63B	6.16	2.785	ELP2	-2.624		-2.109	
ULK63	6.143	5.38	NHS	-2.377		-5.061	
COMP	6.114	7.375	SHC3	-2.265		-2.479	
FBLN2	6.099	5.09	SPIN1	-2.215		-4.069	
SLC39A13	6.017	4.165	RHOQ	-2.207		-2.638	
TMEM68	5.979	2.265	ZC3H13	-2.119		-2.114	
RFX1	5.911	4.092	GXYLT1	-2.01		-6.69	
SMAD7	5.878	3.374	GID8	-2.077		-2.508	
TRH	5.877	8.332	EPB41L3	-2.02		-2.173	
ZBTB25	5.751	2.573	RFLBN	-2.003		-2.518	
(Fold change)							