



**Figure S1** Expression levels (Ct values ) of the internal gene 18S rRNA in all groups after 20E injection. Data represent means and standard deviations.

Table S1 Differentially expressed genes identified from the transcriptome analysis

Gene ID	Symbol	Description	Log2(fold change ESA/control)
MSTRG.32535	Lv-IAG	insulin-like androgenic gland hormone precursor, partial	2.41
ROT75912.1	Gtpbp2	GTP-binding protein 2-like	2.47
ROT83784.1	calu	Calumenin	2.76
ROT65965.1	meng	serine/threonine-protein kinase DDB_G0277165, partial	3.1
ROT62953.1	Serp1b1b	serine proteinase inhibitor	2.63
ROT71033.1	--	leucine-rich repeat-containing protein 20-like	2.75
ROT77030.1	--	ankyrin-3-like isoform X1	2.54
ROT68844.1	HSPA8	heat shock protein 70	2.17
ROT63757.1	eIF2alpha	eukaryotic initiation factor 2 subunit alpha	3.39
ROT69739.1	--	proton-coupled folate transporter-like	3.2
ROT84621.1	PyK	pyruvate kinase 3	1.87
ROT79018.1	--	fibrillin-2-like	1.96
ROT81133.1	cpg-2	filaggrin-2-like isoform X3	-3.09
MSTRG.4961	Bre1	E3 ubiquitin-protein ligase Bre1	1.8
MSTRG.2624	--	cilia- and flagella-associated protein 251-like	-2.47
ROT82626.1	--	mucin-19-like isoform X2	-3.23
ROT82192.1	--	major facilitator superfamily domain-containing protein 12-like	2.06
ROT62108.1	Act57B	actin 1	3.05
ROT82257.1	GGCX	Vitamin K-dependent gamma-carboxylase	-3.1
ROT75911.1	Gtpbp2	GTP-binding protein 2	-2.23
MSTRG.964	--	C-type lectin LmsL-like	1.02
ROT78659.1	Yars	tyrosine--tRNA ligase, cytoplasmic-like	1.94
ROT79619.1	mcm2	DNA replication licensing factor mcm2-like	1.59
MSTRG.33021	yin	solute carrier family 15 member 2-like isoform X4	4.88
ROT75925.1	SERP1B1	<i>serine proteinase inhibitor-3</i>	-3.3
ROT62528.1	--	<i>agglutinin-like protein ARB_02240 isoform X2</i>	1.41
ROT76137.1	HSP90AA1	<i>heat shock protein 90</i>	2.25
ROT76115.1	ATIC	<i>bifunctional purine biosynthesis protein PURH</i>	3.65
ROT82234.1	Hr4	<i>hormone receptor 4 isoform X2</i>	-2.06
ROT70313.1	NAAT1	<i>sodium-dependent nutrient amino acid transporter 1-like</i>	-3.39
ROT73017.1	--	<i>low-density lipoprotein receptor-related protein 2-like</i>	3.9
MSTRG.38881	rsp-7	<i>splicing regulatory glutamine/lysine-rich protein 1-like, partial</i>	1.75
ROT66295.1	Tob1	<i>protein Tob1-like</i>	2.36
ROT78373.1	--	<i>male reproductive-related protein A</i>	-3.61
ROT70946.1	Mi-2	<i>chromodomain-helicase-DNA-binding protein Mi-2 homolog isoform X4</i>	-1.95
ROT85933.1	--	<i>FK506-binding protein 4-like</i>	1.3
ROT64216.1	Slc15a2	<i>solute carrier family 15 member 2-like isoform X3</i>	6.43

ROT69712.1	--	<i>leucine aminopeptidase MCYG_03459-like</i>	3.29
ROT77107.1	ANPEP	<i>aminopeptidase N-like</i>	-2.63
ROT67365.1	--	<i>SE-cephalotoxin</i>	1.75
ROT66805.1	<i>ade5</i>	<i>multifunctional protein ADE2</i>	3.01
ROT62469.1	HSP90B1	<i>endoplasmin</i>	4.25
ROT74957.1	<i>cdc45</i>	<i>cell division control protein 45 homolog</i>	-1.81
ROT75353.1	<i>Plbd1</i>	<i>Phospholipase B lamina ancestor</i>	1.41
ROT84712.1	<i>TpnC41C</i>	<i>troponin C</i>	1.78
MSTRG.5401	--	<i>SWD4</i>	-1.76
ROT75925.1	SERPINB1	<i>serine proteinase inhibitor-3</i>	-3.3
ROT66638.1	<i>Prpf19</i>	<i>pre-mRNA-processing factor 19-like</i>	1.93
ROT85080.1	KCNK17	<i>potassium channel subfamily K member 10-like</i>	2
ROT69384.1	<i>Skeletor</i>	<i>protein Skeletor, isoforms B/C isoform X3</i>	3.5
MSTRG.2017	--	<i>asialoglycoprotein receptor 2-like, partial</i>	4.25
ROT82204.1	GRWD1	<i>glutamate-rich WD repeat-containing protein 1</i>	3.25
ROT72181.1	<i>Iswi</i>	<i>chromatin-remodeling complex ATPase chain Iswi</i>	4.03
ROT76311.1	--	<i>mucin-19-like isoform X1</i>	3.8
MSTRG.34400	CHD4	<i>chromodomain-helicase-DNA-binding protein Mi-2 homolog</i>	-2.94
MSTRG.11644	--	<i>male reproductive-related protein A</i>	-4.12
ROT73814.1	<i>Nup133</i>	<i>nuclear pore complex protein Nup133-like</i>	-2.76
ROT85474.1	<i>ade5</i>	<i>multifunctional protein ADE2</i>	-3.48
ROT64438.1	<i>Pa2g4</i>	<i>proliferation-associated protein 2G4 isoform X2</i>	-7.98
ROT73693.1	--	-	1.1
MSTRG.20484	--	-	-1.75
MSTRG.12394	--	<i>uncharacterized protein LOC113803799</i>	-6.43
MSTRG.8889	--	-	2.35
MSTRG.21195	--	-	1.22
MSTRG.14155	--	-	2.36
MSTRG.15340	--	-	3.65
MSTRG.37456	--	-	-4.26

---