

Table SI. Quantity and quality of extracted total RNA of per biological replicate.

Experiment (SMG)		RNA concentration (ng/μl)	A260	A280	A260/A280
Development	E14.5	304.9	7.623	3.596	2.12
	E15.5	612.8	15.320	7.264	2.11
	E16.5	950	23.750	11.085	2.14
	E17.5	1292.2	32.305	16.202	1.99
	E18.5	605.5	15.137	7.156	2.12
	P0	871.7	21.794	10.320	2.11
	P7	1092.7	27.318	12.944	2.11
	P14	954.4	23.859	11.320	2.11
	P28F	1273.4	31.834	14.958	2.13
	P28M	1228.1	30.704	14.436	2.13
	P56F	1010.3	25.257	11.979	2.11
	P56M	930.7	23.267	10.858	2.14
	P84F	873.9	21.848	10.278	2.13
	P84M	1034.5	25.863	12.025	2.15
	P112F	925.1	23.128	10.786	2.14
	P112M	1055.4	26.384	12.278	2.15
Regeneration	Sham operation group				
	L5d	796.5	19.911	9.485	2.1
	L7d	462.7	11.568	5.486	2.11
	DL7d	930.8	23.269	10.933	2.13
	DL14d	918.1	22.952	10.937	2.1
	DL28d	1143.7	28.591	13.420	2.13
	Ligation/de-ligation group				
	L5d	353.6	8.841	4.217	2.1
	L7d	449.3	11.232	5.331	2.11
	DL7d	643.5	16.088	7.588	2.12
	DL14d	597.7	14.943	7.122	2.1
	DL28d	865.2	21.631	10.184	2.12

A, absorbance (optical density); A260/A280, absorbance ratio at A260 and A280 nm (factor = ng/μl total RNA per 1 unit A260 nm); L, ligation; DL, de-ligation; d, day.

Table SII. Statistical analyses of protein levels of ubiquitin, TUBA1B, GAPDH and ACTB in the SMG development stage.

Protein		TUBA1B															
	Time	E14.5	E15.5	E16.5	E17.5	E18.5	P0	P7	P14	P28F	P28M	P56F	P56M	P84F	P84M	P112F	P112M
ACTB	E14.5		ns	ns	***	***	***	***	***	***	***	***	***	***	***	***	***
	E15.5	ns		ns	***	***	***	***	***	***	***	***	***	***	***	***	***
	E16.5	***	ns		***	***	***	***	***	***	ns	***	***	***	***	***	***
	E17.5	***	***	**		ns	ns	**	ns	ns	***	ns	***	**	***	**	***
	E18.5	**	ns	ns	**		*	***	ns	ns	***	ns	***	***	***	**	***
	P0	**	ns	ns	***	ns		ns	ns	*	***	***	***	ns	***	ns	***
	P7	ns	ns	*	***	ns	ns		**	***	***	***	***	ns	***	ns	***
	P14	ns	ns	**	***	ns	ns	ns		ns	***	**	***	*	***	*	***
	P28F	***	**	ns	ns	ns	**	***	***		**	ns	***	***	***	***	***
	P28M	***	**	ns	ns	ns	*	**	***	ns		ns	***	***	***	***	***
	P56F	***	***	ns	ns	*	**	***	***	ns	ns		***	***	***	***	***
	P56M	***	***	*	ns	**	***	***	***	ns	ns	ns		***	ns	***	ns
	P84F	***	***	ns	ns	*	**	***	***	ns	ns	ns	ns		***	ns	***
	P84M	***	**	ns	ns	ns	**	***	***	ns	ns	ns	ns	ns		***	ns

	P112F	***	***	**	ns	**	***	***	***	ns	ns	ns	ns	ns	ns		***
	P112M	***	***	***	ns	***	***	***	***	**	**	*	ns	*	**	ns	
Protein		GAPDH															
	Time	E14.5	E15.5	E16.5	E17.5	E18.5	P0	P7	P14	P28F	P28M	P56F	P56M	P84F	P84M	P112F	P112M
Ubiquitin	E14.5		ns	ns	**	ns	ns	***	***	*	ns	ns	***	***	***	***	***
	E15.5	ns		ns	**	ns	ns	***	***	**	ns	ns	***	***	***	***	***
	E16.5	***	***		*	ns	ns	**	**	ns	ns	ns	***	**	***	***	***
	E17.5	***	***	***		**	ns	ns	ns	ns	***	***	***	ns	***	**	***
	E18.5	***	***	*	***		ns	***	*	ns	ns	ns	***	***	***	***	***
	P0	***	***	***	ns	***		**	ns	ns	*	*	***	ns	***	***	***
	P7	***	***	***	ns	***	ns		ns	ns	***	***	***	ns	**	ns	***
	P14	***	***	***	ns	***	ns	ns		ns	***	***	***	ns	**	ns	***
	P28F	***	***	***	ns	***	***	ns	*		**	**	***	ns	***	***	***
	P28M	***	***	***	**	***	***	**	**	ns		ns	***	***	***	***	***
	P56F	***	***	***	***	***	***	***	***	***	**		***	***	***	***	***
	P56M	***	***	***	***	***	***	***	***	***	***	***		***	***	***	***
	P84F	***	***	***	***	***	***	***	***	***	***	***	ns		**	ns	***

	P84M	***	***	***	***	***	***	***	***	***	***	***	ns	ns		ns	***
	P112F	***	***	***	***	***	***	***	***	***	***	ns	*	ns	**		***
	P112M	***	***	***	***	***	***	***	***	***	***	***	ns	ns	ns	***	

A one-way ANOVA for repeated measures was used to examine the expression levels of four candidate house-keeping proteins. The level of significance was set at $P < 0.05$.

Data are expressed as the mean $\pm$ standard deviation. The single, double and triple asterisks in the table represent $P < 0.05$, $P < 0.01$ and $P < 0.001$, respectively. ns, no significant difference (considered stable expression); M, male; F, female; E, embryonic; P, post-natal.

Table SIII. Statistical analyses of protein levels of Ubiquitin, TUBA1B, GAPDH and ACTB in SMG regeneration stage.

Protein		TUBA1B									
	Time	L5d Ctrl	L5d	L7d Ctrl	L7d	DL7d Ctrl	DL7d	DL14d Ctrl	DL14d	DL28d Ctrl	DL28d
ACTB	L5d Ctrl		ns	ns	ns	***	***	**	***	*	ns
	L5d	ns		ns	ns	**	**	*	**	ns	ns
	L7d Ctrl	ns	*		ns	**	*	ns	**	ns	ns
	L7d	ns	ns	**		**	*	ns	**	ns	ns
	DL7d Ctrl	ns	ns	ns	**		ns	ns	ns	*	***
	DL7d	ns	ns	ns	*	ns		ns	ns	ns	**
	DL14d Ctrl	ns	ns	ns	*	ns	ns		ns	ns	**
	DL14d	ns	ns	ns	ns	ns	ns	ns		*	***
	DL28d Ctrl	ns	*	ns	**	ns	ns	ns	ns		ns
	DL28d	ns	*	ns	**	ns	ns	ns	ns	ns	
Protein		GAPDH									
	Time	L5d Ctrl	L5d	L7d Ctrl	L7d	DL7d Ctrl	DL7d	DL14d Ctrl	DL14d	DL28d Ctrl	DL28d

Ubiquitin	L5d Ctrl		ns	ns	*	ns	ns	ns	ns	*	***
	L5d	***		ns	***	**	**	ns	*	ns	ns
	L7d Ctrl	***	***		***	ns	ns	ns	ns	ns	*
	L7d	***	ns	***		ns	ns	**	*	***	***
	DL7d Ctrl	***	***	***	*		ns	ns	ns	**	***
	DL7d	***	**	***	ns	ns		ns	ns	**	***
	DL14d Ctrl	***	***	***	*	ns	ns		ns	*	***
	DL14d	***	***	**	***	***	***	***		*	***
	DL28d Ctrl	***	***	***	*	ns	ns	ns	***		ns
	DL28d	***	**	***	ns	ns	ns	ns	***	ns	

A one-way ANOVA for repeated measures was used to examine the expression levels of four candidate house-keeping proteins. The level of significance was set at $P < 0.05$.

Data are expressed as the mean $\pm$ standard deviation. The single, double and triple asterisks in the table represent $P < 0.05$, $P < 0.01$ and $P < 0.001$, respectively. ns, no significant difference (indicating stable expression); M, male; F, female; L, ligation; DL, de-ligation; Ctrl, control.