

Supplementary Tables

Musashi-1 regulates the proliferation of hair cell progenitors during regeneration in the inner ear

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Table S1. Primers used for quantitative RT-PCR.

Gene	Forward primer	Reverse primer	Probe	Product size (bp)
Taqman				
HES5	AAGCTGGAGAAAGCC GACATC	TTCTTTGAGGCACCAG GCATA	FAM-TACAGCCGAGCTTTTGCAGCCTCTG-TAMURA FAM-ACGAGACGCTGCAGATGGCGC-TAMURA	126
Atoh1	AACAACGACAAGAAG CTCTCCAA	GCGAGGGCGCTGATGT AG	FAM-CGCCCCGTCGCTACTACCGATTGG-TAMURA	68
18S	AGTCCCTGCCCTTTGT ACACA	GATCCGAGGGCCTCAC TAAAC		69
SYBR Green				
Musashi-1	GCTTCCAAGCTGCCAC CTAC	TCCGCTCTACACGGAA CTCA		90
Musashi-2	TTGGTTGCCATCTCACT TGG	GGTCGTTTGCTGTTGG TGAA		129
RBPJ	GATGTGGAAGCCGAAA CCAT	CTCCAACCCTCTCGAA ATGC		86
HES1	GGTGAAGCACCTGAGG AACC	TTGAAACCAGCCCGGT ATTT		93
CCND1	GTGGTAGCAGCTGTGC AAGG	TCTTGGCAGGCTCGTA AACA		125
DLK1	GTGCCCAGGGATTTAC AGGA	CTCCATTCTGGCAGGG AGAG		81
MYO6	AGTGTTTCCTGCCGAA GAGG	TGTGGAGGAGAGTGGC TTCA		86
EPYC	AACTGCCTCACCCATT TGTC	CTGTCAACGGTGCAGA AGAA		117
DCN	AGTGT CATCTTCGCGT TGTG	TCCAGCAGAGTTGTGT CAGG		85
GAPDH	GACGTGCAGCAGGAAC ACTA	CTTGGACTTTGCCAGA GAGG		112

Table S2. Genes upregulated more than 5-fold in hair cells than in supporting cells.

Gene	Fold change	RefSeq transcript ID	Gene	Fold change	RefSeq transcript ID
fibrinogen beta chain	37.31	XM_420369	solute carrier family 9	6.85	NM_001031305
delta/notch-like EGF repeat containing	19.65	XM_422604	Fas apoptotic inhibitory molecule 2	6.80	XM_424507
calsyntenin 1	16.29	XM_417603	adenylate cyclase activating polypeptide 1	6.76	NM_001001291
BR serine/threonine kinase 2	13.51	XM_421031	matrilin 4	6.67	XM_425698
nuclear receptor subfamily 1, group H, member 4	13.50	NM_204113	neuronal pentraxin II	6.58	XM_414750
fibronectin type III domain containing 7	12.77	XM_422182	EPH receptor A5	6.49	NM_205105
IQ motif containing with AAA domain	11.03	XM_421878	leucine rich repeat containing 17	6.49	XM_415965
diacylglycerol kinase, iota	10.44	XM_416357	myosin binding protein C, slow type	6.29	XM_416332
mannose-binding lectin (protein C) 2, soluble	9.01	NM_204349	calcium binding protein 39-like	6.25	NM_001006272
neuroplastin	9.01	XM_413703	calcium binding protein 39-like	6.25	NM_001006272
chromogranin A (parathyroid secretory protein 1)	8.77	XM_421330	synaptosomal-associated protein, 25kDa	6.25	NM_205458
hydrocephalus inducing homolog (mouse)	8.77	XM_425112	otoferlin	6.10	XM_420015
secretogranin III	8.55	XM_413807	calcium binding protein 39-like	5.95	NM_001006272
NFASC, transcript variant 2, mRNA.; isoform 3	8.26	NM_001004394; NM_001004493; NM_001004709	synaptosomal-associated protein, 25kDa	5.92	NM_205458
			potassium voltage-gated channel, shaker-related subfamily, beta member 1	5.88	NM_204906
			ATPase, Ca ⁺⁺ transporting, plasma membrane 2	5.78	XM_414301
potassium voltage-gated channel, shaker-related subfamily, member 10	8.00	NM_204462	bone morphogenetic protein 2	5.78	NM_204358
diacylglycerol kinase, iota	7.63	XM_416357	insulin-like growth factor 2 receptor	5.78	NM_204970
titin	7.63	XM_421979	coagulation factor XIII, A1 polypeptide	5.75	NM_204685
nuclear factor related to kappaB binding protein	7.52	NM_001006317	cadherin 2, type 1, N-cadherin (neuronal)	5.71	NM_001001615
hexosaminidase A (alpha polypeptide)	7.41	NM_001030390	doublecortin-like kinase 2	5.71	XM_420439
titin	7.41	XM_421979	R-spondin 3 homolog (Xenopus laevis)	5.65	XM_419752
brain-derived neurotrophic factor	7.30	NM_001031616	N-acetylglucosaminyltransferase VI	5.62	NM_204681

lipxygenase homology domains 1	7.25	XM_425221	proprotein convertase subtilisin/kexin type 2	5.29	XM_419332
adenylate cyclase activating polypeptide 1 (pituitary)	7.04	NM_001001291	delta/notch-like EGF repeat containing	5.21	XM_422604

Table S3. Genes upregulated more than 2.5-fold in supporting cells than in hair cells.

Gene	Fold change	RefSeq transcript ID	Gene	Fold change	RefSeq transcript ID
fibrinogen beta chain	37.31	XM_420369	solute carrier family 9 (sodium/hydrogen exchanger), member 9	6.85	NM_001031305
delta/notch-like EGF repeat containing	19.65	XM_422604	Fas apoptotic inhibitory molecule 2	6.80	XM_424507
calsyntenin 1	16.29	XM_417603	adenylate cyclase activating polypeptide 1 (pituitary)	6.76	NM_001001291
BR serine/threonine kinase 2	13.51	XM_421031	matrilin 4	6.67	XM_425698
nuclear receptor subfamily 1, group H, member 4	13.50	NM_204113	neuronal pentraxin II	6.58	XM_414750
fibronectin type III domain containing 7	12.77	XM_422182	EPH receptor A5	6.49	NM_205105
IQ motif containing with AAA domain	11.03	XM_421878	leucine rich repeat containing 17	6.49	XM_415965
diacylglycerol kinase, iota	10.44	XM_416357	myosin binding protein C, slow type	6.29	XM_416332
mannose-binding lectin (protein C) 2, soluble	9.01	NM_204349	calcium binding protein 39-like	6.25	NM_001006272
neuroplastin	9.01	XM_413703	calcium binding protein 39-like	6.25	NM_001006272
chromogranin A (parathyroid secretory protein 1)	8.77	XM_421330	synaptosomal-associated protein, 25kDa	6.25	NM_205458
hydrocephalus inducing homolog (mouse)	8.77	XM_425112	otoferlin	6.10	XM_420015
secretogranin III	8.55	XM_413807	calcium binding protein 39-like	5.95	NM_001006272
neurofascin; isoform 2 precursor is encoded by transcript variant 2; Gallus gallus neurofascin (NFASC), transcript variant 2, mRNA.; isoform 3 precursor is encoded by transcript variant 3; Gallus gallus neurofascin (NFASC), transcript variant 3, mRNA.	8.26	NM_001004394; NM_001004493; NM_001004709	synaptosomal-associated protein, 25kDa	5.92	NM_205458
			potassium voltage-gated channel, shaker-related subfamily, beta member 1	5.88	NM_204906
			ATPase, Ca ⁺⁺ transporting, plasma membrane 2	5.78	XM_414301
potassium voltage-gated channel,	8.00	NM_204462	bone morphogenetic protein 2	5.78	NM_204358

shaker-related subfamily, member 10					
diacylglycerol kinase, iota	7.63	XM_416357	insulin-like growth factor 2 receptor	5.78	NM_204970
titin	7.63	XM_421979	coagulation factor XIII, A1 polypeptide	5.75	NM_204685
nuclear factor related to kappaB binding protein	7.52	NM_001006317	cadherin 2, type 1, N-cadherin (neuronal)	5.71	NM_001001615
hexosaminidase A (alpha polypeptide)	7.41	NM_001030390	doublecortin-like kinase 2	5.71	XM_420439
titin	7.41	XM_421979	R-spondin 3 homolog (Xenopus laevis)	5.65	XM_419752
brain-derived neurotrophic factor	7.30	NM_001031616	N-acetylglucosaminyltransferase VI	5.62	NM_204681
lipxygenase homology domains 1	7.25	XM_425221	proprotein convertase subtilisin/kexin type 2	5.29	XM_419332
adenylate cyclase activating polypeptide 1 (pituitary)	7.04	NM_001001291	delta/notch-like EGF repeat containing	5.21	XM_422604
Fas apoptotic inhibitory molecule 2	6.99	XM_424507	heat shock protein 90kDa beta (Grp94), member 1	5.13	NM_204289
glypican 4	6.90	XM_420222	adhesion molecule with Ig-like domain 2	5.10	XM_416052
serpin peptidase inhibitor, clade I (neuroserpin), member 1	6.85	NM_001004411	slit homolog 3 (Drosophila)	5.03	XM_414503