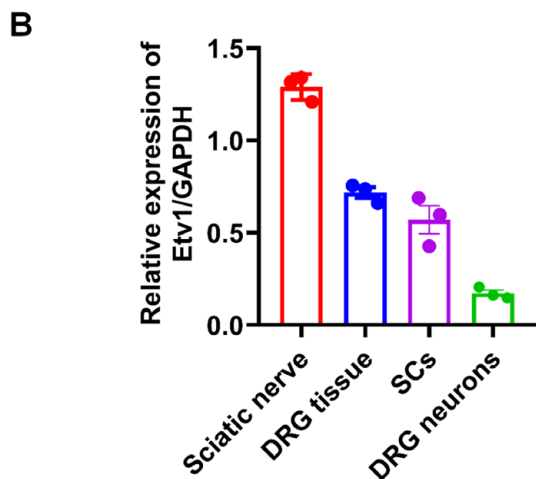
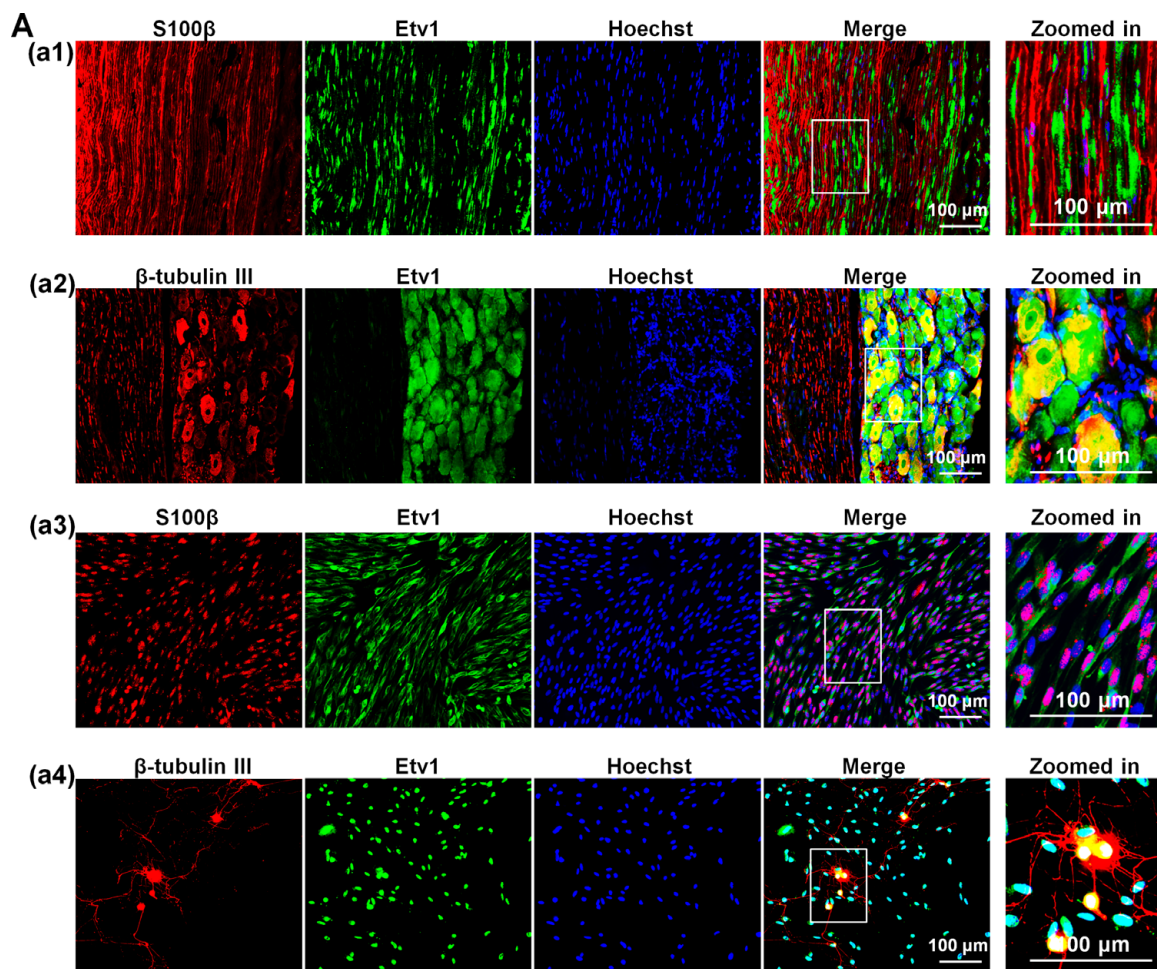


**Figure S1** Validation of the Etv1-siRNAs interference efficiency. Western blots comparing Etv1 levels in SCs transfected with Etv1-siRNAs or scramble siRNA for 48 hours. The histogram shows that Etv1-siRNA significantly knocked down the expression of Etv1 in SCs. \*\*\* $P < 0.001$  vs. scramble; NS, not significant;  $t$ -test;  $n = 3$ .



**Figure S2** Etv1 expression and cell localization in PNS tissues (such as the DRG and sciatic nerves) and cells (such as SCs and DRG neurons). (A) Immunofluorescence double labeling (Etv1 and S100β or β-tubulin III) showing the expression and cell location of Etv1 in sciatic nerve (a1), DRG tissue (a2), SCs (a3), and DRG neurons co-cultured with SCs. (a4) A high magnification view of the boxed inset. Scale bar =100 μm. (B) The relative expression of Etv1 in the sciatic nerve, DRG tissue, SCs, and DRG neurons (n=3). PNS, peripheral nervous system; DRG, dorsal root ganglion; SC, Schwann cell; GAPDH, glyceraldehyde 3-phosphate dehydrogenase.



**Table S2** The target gene (TR) list of 4 candidate transcript factors

TF name	TR name	TF name	TR name	TF name	TR name	TF name	TR name
Etv1	Gdap1	Egr2	Mbp	Zeb1	Mbp	Sin3a	Pmp22
	Hspb1		Pmp22		Mag		Prx
	Mtmr2		Plp1		Egr2		Egr2
	Ndr1		Mag		Gdap1		Gdap1
	Clcn2		Prx		Nefl		Hspb8
	Pex5		Egr2		Clcn2		Hspb1
	Scn9a		Gdap1		Mars		Mtmr2
	Mars		Hspb8		Sptlc1		Nefl
	Sptlc1		Hspb1		Lmnb1		Ndr1
	Abcd1		Nefl		Atf1		Fgd4
	Pex16		Ndr1		Sumf1		Cnp
	Ntrk1		Cnp		Erb3		Clcn2
	Lmnb1		Clcn2		Ugt8		Pex5
	Sumf1		Pex5		Nrg1		Scn9a
	Tf		Scn9a		Ptprz1		Pex19
	Prkca		Sacs		Prkca		Mars
	Stmn3		Abcd1		Ttc9b		Mpz1
	Upk1b		Apoe		Atf4		Sptlc1
	Anpep		Mecp2		Egr2		Sacs
	Kifc1		Ntrk1		Nab2		Abcd1
	Atf4		Lmnb1		Nfatc4		Apoe
	Egr1		Gnao1		Sin3a		Mecp2
	Nab2		Atf1		Smad7		Pex16
	Sin3a		Nr1h3		Sqstm1		Ntrk1
	Smad7		Rtn4r		Srebf1		Lmnb1
	Sqstm1		Shank3		Tcf7l2		Gnao1
	Srebf1		Bdnf				Atf1
	Stat1		Erb3				Sumf1
	Tf		Spp1				Snai2
			Mapt				Cryab
			Ugt8				Nf2
			Gdnf				Bdnf
			Pdgfra				D2hgdh
			Ptprz1				Plip
			Fgf2				Erb3
			Fgfr2				Mapt
			Tf				Ugt8
			Prkca				Plcb1
			Tac1				Cntn1
			Fgf13				Nrg1
			Ttc9b				Gpm6a
			Rasd2				Ret
			Stmn3				Pdgfra
			Apoe				Gap43
			Cdhr4				Fgf2
			Olig1				Fgfr2
			Snap25				Tf
			Hopx				Prkca
			Syp				Ttc9b
			Kifc1				Stmn3
			Atf4				Apoe
			Egr1				Eef1a2
			Egr2				Upk1b
			Id4				Snap25
			Nab2				Hopx
			Nfatc4				Syp
			Pou3f2				Kifc1
			Sin3a				Atf4
			Smad7				Egr1
			Sqstm1				Id4
			Srebf1				Nab2
			Stat1				Nfatc4
			Tcf7l2				Sin3a
			Tf				Smad7
							Sqstm1
							Srebf1
							Stat1
							Tcf7l2
							Tf

**Table S3** Sequences of siRNA used in RNA interference

Name	Sequence
Etv1	siRNA #1: 5'- CGTTCTCTCCGCTATTATT-3'
	siRNA #2: 5'- CAGCTTTCTGAACCCTGTA -3'
	siRNA #3: 5'- CACAGCTCATACTCCGAAA -3'

**Table S4** Primers used in qRT-PCR

Name	Sequence
Etv1	F 5'- ATCTCAGTGTTGCCAGCCTC -3'
	R 5'- AATCGAGTCACAGTAGCGGC -3'
Egr2	F 5'- AGGTTGTGCGAGGAGCAAAT -3'
	R 5'- ATTGGGGAAGATGGTCACCG -3'
Pou3f	F 5'- TCCTCAAATGCCCTAAGCCC -3'
	R 5'- CGGGAGGGGTCATCCTTTTC -3'
Myrf	F 5'- GTCATCACCAGTGGTCCCAG -3'
	R 5'- CTGGACCTGCATGGGCAC -3'
GAPDH	F 5'- GCATCTTCTTGTGCAGTGCC -3'
	R 5'- GATGGTGATGGGTTTCCCGT -3'

**Table S5** Primers used in ChIP-qPCR

Name		Sequence
GAPDH promoter	F	5'- CATGGGTGTGAACCATGAGA - 3'
	R	5'- GTCTTCTGGGTGGCAGTGAT - 3'
P0 (MPZ) promoter	F1	5'- TGCTGGTGACAGTTTTGTCC - 3'
	R1	5'- CCTTCCATGCATCTCAGATC - 3'
	F2	5'- CTGCATGGCAAAGGAATC- 3'
	R2	5'- GAGATTCTACCCAGGCAGAAG- 3'
MAG promoter	F1	5'- TGGCTCAGCCACAGACTC- 3'
	R1	5'- ACACTGGTGTCACTGAGCTG- 3'
	F2	5'- CTGGCTCCGGAGTTAAGTGC- 3'
	R2	5'- CCTGGGACTCAGAGATGTC- 3'
	F3	5'- GAGGTGGTGGGGTGATTCT- 3'
	R3	5'- GTCCCAAGAGACAGGTAGAGAC- 3'
Pmp22 promoter	F1	5'- CGGATGTTAAAGGTATGCTAGG- 3'
	R1	5'- CGCTAATCTTTGCAATGGC- 3'
	F2	5'- CAGTGAGATCGTTGGTCATG- 3'
	R2	5'- GCCAGCATTCTTCAAGTCTC- 3'
	F3	5'- GCCTGTACACAGGTCAGTGT- 3'
	R3	5'- GACAGTGTCCAGCTTGTGTATC- 3'
Zeb2 promoter	F1	5'- CCCACCTACTTACGTGTTTCC- 3'
	R1	5'- GTGTGAGGGAAAGACATGG- 3'
	F2	5'- GGAAAGAGACAGTGCCTCG- 3'
	R2	5'- CCTTGGATGAAGCACACTC- 3'
Runx2 promoter	F1	5'- CTTTAGGTCAATTTGAATGACC- 3'
	R1	5'- GGATAGTAAGTAAATGCCTTCCC- 3'
	F2	5'- GACCCTAAATGAAACTTCAGTG- 3'
	R2	5'- ATGACAAAACACAGCAATAC- 3'
	F3	5'- CTATCCAATCCTCATGAGTCAC- 3'
	R3	5'- TCCCTTTCTCCCTCTCTGAC- 3'

**Table S6** Primers used for expression vector construction in luciferase reporter assay

Name		Sequence
Etv1 (NM_001163156)	F	5'-TTTCTCTATCGATAGGTACATGGATTTTATGACCAGCAAGTG -3'
	R	5'- CTTAGATCGCAGATCTCGAGTTAGTACACGTATCCTTCGTTGT -3'
Mpz (P0) (NM_017027-promoter(-2780~86))	F	5'-TTTCTCTATCGATAGGTACCATGGAAGGAAGTGAAGTTAAGTGAGGATATTG -3'
	R	5'- CTTAGATCGCAGATCTCGAGGCTTAAATCCCCTGGATCCCCAGCATG -3'
Mpz (P0) (NM_017027-promoter(-2780~86)-mut)	F	5'-TTCTCTATCGATAGGTACCATGGAAGGAAGTGAAGTTAAGTGAGGATATTG -3'
	R	5'-CTTAGATCGCAGATCTCGAGGCTTAAATCCCCTGGATCCCCAGCATG -3'
MAG (NM_017190-promoter(-2130~19))	F	5'- TTTCTCTATCGATAGGTACCTTATGGGTGGGCTCCTAACC -3'
	R	5'- CTTAGATCGCAGATCTCGAGTTGGATGGTCTGGCTTCTGCGCG -3'
MAG (NM_017190-promoter(-2130~19)-mut)	F	5'- TTTCTCTATCGATAGGTACCTTATGGGTGGGCTCCTAACC -3'
	R	5'- CTTAGATCGCAGATCTCGAGTTGGATGGTCTGGCTTCTGCGCG -3'
Pmp22 (NM_017037-promoter(-1000~105))	F	5'- TTTCTCTATCGATAGGTACCTGGGACAAGTGGCCAGACTC-3'
	R	5'- CTTAGATCGCAGATCTCGAGGCCCTCCCCGCAGGACAGCGGATG -3'
Pmp22 (NM_017037-promoter(-1000~105) -mut)	F	5'- TTTCTCTATCGATAGGTACCTGGGACAAGTGGCCAGACTC-3'
	R	5'- CTTAGATCGCAGATCTCGAGGCCCTCCCCGCAGGACAGCGGATG -3'
Runx2 (NM_001278483-promoter(-2350~71))	F	5'- TTTCTCTATCGATAGGTACCGGTGGTAAAGATTATTCAAATTAAC -3'
	R	5'- CTTAGATCGCAGATCTCGAGTTGCTGTCTCCTGGAGAAAGTTTG -3'
Runx2 (NM_001278483-promoter(-2350~71) -mut)	F	5'- TTTCTCTATCGATAGGTACCGGTGGTAAAGATTATTCAAATTAAC -3'
	R	5'- CTTAGATCGCAGATCTCGAGTTGCTGTCTCCTGGAGAAAGTTTG -3'