

**Table S1** Data filtering statistics.

sample	raw reads	clean reads	clean bases	Low-quality Reads Rate(%)	Q30 (%)
C1	39,730,840	38,840,788	5,826,118,200	0.59	95.62
C2	39,331,572	38,355,994	5,753,399,100	0.76	95.51
C3	40,806,072	39,610,748	5,941,612,200	0.57	96.09
E1	40,608,684	39,708,358	5,956,253,700	0.62	95.95
E2	40,627,306	39,550,518	5,932,577,700	0.59	95.9
E3	40,887,112	39,169,804	5,875,470,600	1.02	93.87
P1	47,450,334	46,362,828	6,954,424,200	0.49	96.27
P2	41,561,450	40,140,224	6,021,033,600	0.6	94.87
P3	47,653,850	46,235,920	6,935,388,000	0.67	95.11
L1	45,474,400	44,003,540	6,600,531,000	0.75	95.38
L2	45,652,454	44,415,254	6,662,288,100	0.8	95.23
L3	49,330,868	47,810,886	7,171,632,900	0.83	95.16

Low-quality reads, sequences removed because of a high number of low-quality bases; Q30, Percentage of bases with value >30 (error rate <0.1%) in the total sequence after filtration.

**Table S2** Clean read mapping statistical analysis.

sample	C1	C2	C3	E1	E2	E3	P1	P2	P3	L1	L2	L3
Total	38,840,7	38,355,9	39,610,7	39,708,3	39,550,5	39,169,8	44,003,5	44,415,2	47,810,8	46,362,8	40,140,2	46,235,9
Reads	88	94	48	58	18	04	40	54	86	28	24	20
Mapped	37,417,1	36,868,6	38,190,4	38,264,6	38,024,7	37,533,9	42,282,6	42,688,3	45,910,9	44,640,0	38,571,0	44,310,1
Reads	00	78	50	40	39	70	11	85	93	78	71	09
Mapping Rate	0.9633	0.9612	0.9641	0.9636	0.9614	0.9582	0.9609	0.9611	0.9603	0.9628	0.9609	0.9583
UnMappe d Reads	1,423,68	1,487,31	1,420,29	1,443,71	1,525,77	1,635,83	1,720,92	1,726,86	1,899,89	1,722,75	1,569,15	1,925,81
MultiMap Reads	8	6	8	8	9	4	9	9	3	0	3	1
MultiMap Reads	2,143,02	2,007,34	2,119,50	2,134,95	2,183,45	2,272,09	2,447,40	2,552,37	2,628,49	2,687,33	2,287,14	2,546,33
Reads	8	4	7	4	2	4	4	1	3	9	8	8

Total Reads, total number of sequences after filtration; Mapped/Unmapped Reads, number of sequences mapped/not mapped into a genome; MultiMap Reads, number of sequences aligned to multiple locations in the genome.

**Table S3** Differential expressed genes in sciatic nerves at different stages of EAN. Adjusted *P*-value < 0.05 and |log<sub>2</sub> fold change| ≥ 1. FC, fold change.

a. early neuritis vs. control. b. peak neuritis vs. control. c. late neuritis vs. control.

(a) early neuritis vs. control

gene	log <sub>2</sub> FC	<i>P</i> adj	trend	gene	log <sub>2</sub> FC	<i>P</i> adj	trend
<i>Mrgprg</i>	-2.213	2.91E-07	down	<i>Tnfaip6</i>	-1.043	0.043	down
<i>Fosb</i>	-2.092	4.55E-08	down	<i>Col8a1</i>	-1.012	0.023	down
<i>Cpa3</i>	-1.545	5.19E-04	down	<i>Slc4a1</i>	1.211	0.048	up
<i>Ms4a2</i>	-1.544	5.36E-04	down	<i>Emb</i>	1.245	0.048	up
<i>Egr1</i>	-1.453	8.98E-04	down	<i>C3</i>	1.267	0.050	up
<i>Pi15</i>	-1.450	6.478E-03	down	<i>Plac8</i>	1.275	0.029	up
<i>Smpd3</i>	-1.446	0.013	down	<i>Hhat1</i>	1.282	0.042	up
<i>Mrgprb3</i>	-1.407	0.006	down	<i>Smpx</i>	1.288	0.041	up
<i>Fos</i>	-1.374	6.92E-04	down	<i>Alox15</i>	1.295	0.029	up
<i>Adgrd1</i>	-1.218	1.01E-03	down	<i>Hba-a2</i>	1.297	0.029	up
<i>Hmcn2</i>	-1.188	0.037	down	<i>Illrn</i>	1.337	0.030	up
<i>Xkr7</i>	-1.150	0.011	down	<i>Lilrb4</i>	1.349	0.020	up
<i>Sema3c</i>	-1.097	7.72E-04	down	<i>Lgals5</i>	1.364	0.026	up
<i>DEPP</i>	-1.083	0.048	down	<i>Alas2</i>	1.474	0.011	up
<i>F3</i>	-1.068	0.039	down	<i>Car2</i>	1.610	0.001	up
<i>Sik1</i>	-1.063	0.037	down	<i>Fabp3</i>	2.009	2.91E-07	up
<i>Tnfrsf11b</i>	-1.043	0.028	down				

(b) peak neuritis vs. control

gene	log <sub>2</sub> FC	<i>P</i> adj	trend	gene	log <sub>2</sub> FC	<i>P</i> adj	trend
<i>Lep</i>	-2.015	4.35E-08	down	<i>Angptl4</i>	1.264	3.48E-04	up

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<i>Oxtr</i>	-1.721	3.64E-05	down	<i>Ccl9</i>	1.264	9.39E-03	up
<i>Cyp2c11</i>	-1.251	3.82E-03	down	<i>Gbp2</i>	1.273	5.09E-05	up
<i>Epyc</i>	-1.213	3.91E-04	down	<i>Add2</i>	1.275	4.71E-03	up
<i>Cilp</i>	-1.204	1.46E-02	down	<i>Csf2rb</i>	1.275	2.04E-04	up
<i>Nr1d1</i>	-1.126	3.79E-05	down	<i>Sln</i>	1.275	3.22E-04	up
<i>Smpd3</i>	-1.090	0.034	down	<i>Emb</i>	1.281	8.28E-03	up
<i>Egr1</i>	-1.072	0.016	down	<i>Hbb</i>	1.282	7.98E-03	up
<i>Adamts16</i>	-1.023	0.024	down	<i>Il2rg</i>	1.282	1.69E-03	up
<i>Idi1</i>	-1.020	0.013	down	<i>Bst1</i>	1.291	4.81E-03	up
<i>Col26a1</i>	-1.004	0.014	down	<i>SI00a8</i>	1.306	5.21E-03	up
<i>Slco2a1</i>	1.005	0.007	up	<i>Lilrb3</i>	1.322	1.17E-03	up
<i>Marc1</i>	1.015	0.044	up	<i>Ccl19</i>	1.325	4.04E-03	up
<i>Akr1cl</i>	1.015	1.74E-05	up	<i>Arl5c</i>	1.329	5.01E-03	up
<i>Fam110d</i>	1.017	4.71E-03	up	<i>Gpihbp1</i>	1.374	1.47E-04	up
<i>Vcam1</i>	1.018	0.002	up	<i>Fcgr3a</i>	1.374	0.003	up
<i>Stambpl1</i>	1.023	0.024	up	<i>Olr1</i>	1.385	0.003	up
<i>Itgax</i>	1.024	0.007	up	<i>Psmb8</i>	1.386	1.32E-05	up
<i>Hmgcs2</i>	1.033	0.041	up	<i>SI00a9</i>	1.399	0.002	up
<i>RT1-Db1</i>	1.039	0.009	up	<i>Gprin3</i>	1.399	0.002	up
<i>Rasa4</i>	1.043	0.001	up	<i>Apol11a</i>	1.413	1.12E-07	up
<i>RT1-Da</i>	1.049	0.009	up	<i>Upp1</i>	1.416	1.12E-07	up
<i>Igtp</i>	1.050	2.33E-03	up	<i>Mt2A</i>	1.446	2.11E-04	up
<i>Arhgap27</i>	1.057	1.82E-02	up	<i>Psmb9</i>	1.454	1.08E-08	up
<i>Ccl2</i>	1.075	4.39E-02	up	<i>Il1rn</i>	1.471	1.00E-03	up
<i>Bin2a</i>	1.081	4.49E-02	up	<i>Tap1</i>	1.479	4.46E-06	up
<i>Plaur</i>	1.082	9.27E-03	up	<i>Cyp2e1</i>	1.486	1.87E-04	up
<i>Il2rb</i>	1.085	4.39E-02	up	<i>Lcn2</i>	1.491	4.74E-05	up
<i>Tkl1</i>	1.093	2.47E-02	up	<i>Tnfrsf14</i>	1.500	5.39E-04	up
<i>Akr1b10</i>	1.095	1.51E-02	up	<i>Scimp</i>	1.509	5.07E-04	up

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<i>Jak3</i>	1.097	1.36E-03	up	<i>Chi3l1</i>	1.515	1.69E-05	up
<i>Plvap</i>	1.099	7.80E-03	up	<i>Gngt2</i>	1.517	8.68E-06	up
<i>Cxcl14</i>	1.100	8.63E-05	up	<i>Irf1</i>	1.527	5.20E-08	up
<i>Ahsp</i>	1.103	4.11E-02	up	<i>Clec4e</i>	1.533	4.14E-04	up
<i>Fcgr2b</i>	1.104	2.56E-04	up	<i>Rhd</i>	1.557	3.23E-04	up
<i>Pla2g7</i>	1.105	3.97E-02	up	<i>Hba-a3</i>	1.558	6.35E-05	up
<i>Hbq1b</i>	1.111	2.71E-02	up	<i>Lyz2</i>	1.575	1.65E-05	up
<i>RT1-N2</i>	1.115	3.70E-03	up	<i>Fchol</i>	1.579	2.04E-04	up
<i>Slamf8</i>	1.120	3.33E-02	up	<i>LOC103694855</i>	1.592	8.26E-05	up
<i>Scnn1g</i>	1.120	2.84E-02	up	<i>Hk3</i>	1.598	1.53E-04	up
<i>APOL3</i>	1.122	3.29E-02	up	<i>Car2</i>	1.610	7.36E-05	up
<i>ECYT6</i>	1.123	3.29E-02	up	<i>Trpm2</i>	1.618	8.26E-05	up
<i>Slc11a1</i>	1.132	1.68E-02	up	<i>Ass1</i>	1.637	6.86E-05	up
<i>Mctp1</i>	1.133	3.18E-03	up	<i>MGC105649</i>	1.660	1.65E-05	up
<i>Ccr5</i>	1.139	2.69E-02	up	<i>Acod1</i>	1.703	2.86E-05	up
<i>Ifitm1</i>	1.142	3.64E-05	up	<i>LOC500712</i>	1.732	7.28E-06	up
<i>Mcempl</i>	1.142	2.70E-02	up	<i>Cxcl13</i>	1.753	3.17E-06	up
<i>Klrb1a</i>	1.146	2.84E-02	up	<i>Nlrc5</i>	1.761	9.99E-09	up
<i>Cd8a</i>	1.149	1.61E-02	up	<i>Ccl5</i>	1.794	4.90E-06	up
<i>Nilr1</i>	1.153	2.45E-02	up	<i>Hba-a2</i>	1.803	1.19E-06	up
<i>Dok3</i>	1.155	0.016	up	<i>Cxcl11</i>	1.808	1.12E-05	up
<i>RT1-CE4</i>	1.156	4.30E-05	up	<i>Plac8</i>	1.844	5.76E-11	up
<i>Coch</i>	1.160	2.54E-02	up	<i>Tnnt1</i>	1.851	5.82E-06	up
<i>Pgm5</i>	1.160	5.68E-05	up	<i>Hba-a2</i>	1.868	3.85E-07	up
<i>Cd300lg</i>	1.163	0.021	up	<i>Rbp7</i>	1.874	4.27E-10	up
<i>Fam167b</i>	1.194	3.78E-03	up	<i>Selp</i>	1.894	1.82E-13	up

<i>Plxna4</i>	1.201	0.018	up	<i>Lbp</i>	1.969	1.82E-11	up
<i>Itgal</i>	1.216	0.014	up	<i>Lilrb4</i>	2.010	1.21E-07	up
<i>Lst1</i>	1.216	0.015	up	<i>Cxcl9</i>	2.058	1.08E-08	up
<i>Sectm1a</i>	1.221	0.013	up	<i>Trim63</i>	2.093	5.58E-10	up
<i>Abi3</i>	1.243	1.65E-04	up	<i>Alas2</i>	2.243	6.25E-10	up
<i>Sell</i>	1.248	9.26E-03	up	<i>Lgals5</i>	2.287	1.54E-10	up
<i>Irf4</i>	1.254	8.38E-03	up	<i>RT1-CE5</i>	2.412	5.68E-25	up
<i>Gbp5</i>	1.254	7.36E-05	up	<i>RGD13051</i>			
				84	2.477	3.19E-12	up
<i>Myh7</i>	1.255	8.74E-03	up	<i>Alox15</i>	2.567	4.07E-13	up
<i>Sectm1b</i>	1.258	7.80E-03	up	<i>C3</i>	2.567	1.05E-14	up
<i>Bid</i>	1.260	6.83E-03	up	<i>Slc4a1</i>	2.881	4.78E-17	up
<i>Slfn4</i>	1.263	6.70E-05	up	<i>Ubd</i>	3.977	1.09E-37	up
<i>Htr2b</i>	1.263	1.11E-03	up				

(c) late neuritis vs. control

gene	log <sub>2</sub> FC	P adj	trend	gene	log <sub>2</sub> FC	P adj	trend
<i>Fosb</i>	-1.637	4.57E-08	down	<i>Kcnc4</i>	1.228	1.02E-03	up
<i>Egr1</i>	-1.076	3.08E-03	down	<i>Hk3</i>	1.228	2.33E-03	up
<i>Clec7a</i>	1.008	1.07E-02	up	<i>Hba-a2</i>	1.232	7.52E-04	up
<i>Mmp8</i>	1.011	2.50E-02	up	<i>Prcl</i>	1.235	1.31E-04	up
<i>Fcgr3a</i>	1.012	2.13E-02	up	<i>Ppp1r1a</i>	1.239	1.34E-03	up
<i>LOC1036948</i>				<i>Rtn2</i>	1.242	1.50E-03	up
55	1.020	2.50E-02	up	<i>Sln</i>	1.253	4.88E-04	up
<i>Plac8</i>	1.022	7.33E-03	up	<i>Cthrc1</i>	1.260	8.03E-04	up
<i>Top2a</i>	1.026	2.50E-02	up	<i>Hbb</i>	1.271	1.11E-03	up
<i>Tmem38a</i>	1.027	2.24E-02	up	<i>Csf3r</i>	1.272	7.00E-04	up
<i>Gbp2</i>	1.030	2.82E-03	up	<i>Hba-a2</i>	1.280	4.95E-04	up
<i>Bid</i>	1.044	1.34E-02	up				

<i>Popdc3</i>	1.053	1.68E-02	up	<i>Aqp4</i>	1.283	6.08E-04	up
<i>Alox15</i>	1.055	1.25E-02	up	<i>Myog</i>	1.289	6.82E-04	up
<i>Myf6</i>	1.056	1.03E-02	up	<i>Ngfr</i>	1.326	6.08E-04	up
<i>Cdca3</i>	1.076	1.38E-02	up	<i>Car2</i>	1.331	2.84E-03	up
<i>Emb</i>	1.084	1.36E-02	up	<i>Scimp</i>	1.367	3.42E-04	up
<i>Slc38a3</i>	1.089	1.28E-02	up	<i>Ccl5</i>	1.377	2.24E-04	up
<i>Nlrc5</i>	1.090	3.77E-03	up	<i>Lgals5</i>	1.391	2.26E-04	up
<i>Pcsk1</i>	1.094	1.23E-02	up	<i>RT1-CE5</i>	1.449	6.55E-08	up
<i>Iqgap3</i>	1.098	8.18E-03	up	<i>Cxcl13</i>	1.477	4.57E-08	up
<i>Tkl1</i>	1.117	7.33E-03	up	<i>Alas2</i>	1.522	1.07E-05	up
<i>Cxcl9</i>	1.148	3.08E-03	up	<i>C3</i>	1.524	8.78E-06	up
<i>LOC1036948</i>							
57	1.155	5.40E-03	up	<i>Sell</i>	1.562	7.69E-06	up
<i>Lyz2</i>	1.162	5.57E-08	up	<i>Trpm2</i>	1.651	2.97E-07	up
<i>Olr1</i>	1.170	4.80E-03	up	<i>Fabp3</i>	1.667	8.85E-08	up
<i>Neurl1</i>	1.171	3.77E-03	up	<i>Trim63</i>	1.671	8.85E-08	up
<i>Ptprn</i>	1.178	3.08E-03	up	<i>Hhat1</i>	1.687	6.89E-07	up
<i>Gngt2</i>	1.180	7.00E-04	up	<i>Lilrb4</i>	1.791	5.06E-10	up
<i>Tuba4a</i>	1.181	3.77E-03	up	<i>S100a8</i>	1.797	7.55E-08	up
<i>Il1rn</i>	1.185	3.68E-03	up	<i>Ubd</i>	2.197	8.64E-12	up