SUPPLEMENTARY FIG. S4. Myelination of peripheral nerve (SN) from *Sod1*$^{-/-}$ and *mSod1KO* genotypes. (A) Myelin blots with their respective loading controls. **(B)** Transverse section of a *SN* from a *WT* (*Sod1*$^{+/+}$) mouse (*top panel*). $20\times$ original magnification. Scale bar, $100\,\mu$m; bottom *left panel* shows enlarged area marked by *red box* in the *top panel* to show the morphology and myelin thickness of motor axons of the peripheral nerve. $60\times$ original magnification. Scale bar, $10\,\mu$m; transverse section of an *SN* from an *Sod1*$^{-/-}$ mouse (*bottom right panel*). Note reduced myelin thickness of motor axons from peripheral nerve of the *Sod1*$^{-/-}$ model, indicated by arrowheads. $60\times$ original magnification. Scale bar, $10\,\mu$m; myelin thickness and g-ratio quantifications (*right panel*) of peripheral nerve from *Sod1*$^{-/-}$ and the respective *WT* mice, *$p < 0.05$ compared with values from the respective *WT* mice, $n = 3$ mice/strain. SN, sciatic nerve.

Label Free LC-MS Analysis
MS Data Analysis and Search Parameters
Result Filtration Parameters.

Retention Time	≥ 0
Retention Time	≤ 110
Feature Fold Change	≥ 1
Quality	≥ 1
Average Area	≥ 0
Charge	≥ 1
Charge	≤ 10
Confident Sample Number	≥ 1
With Peptide ID	True
Normalization	Total Ion current
Protein Significance	≥ 20
Confident Unique Supports	≥ 1