Supplementary information

Blood nerve barrier permeability enables nerve targeting of circulating nanoparticles in experimental autoimmune neuritis

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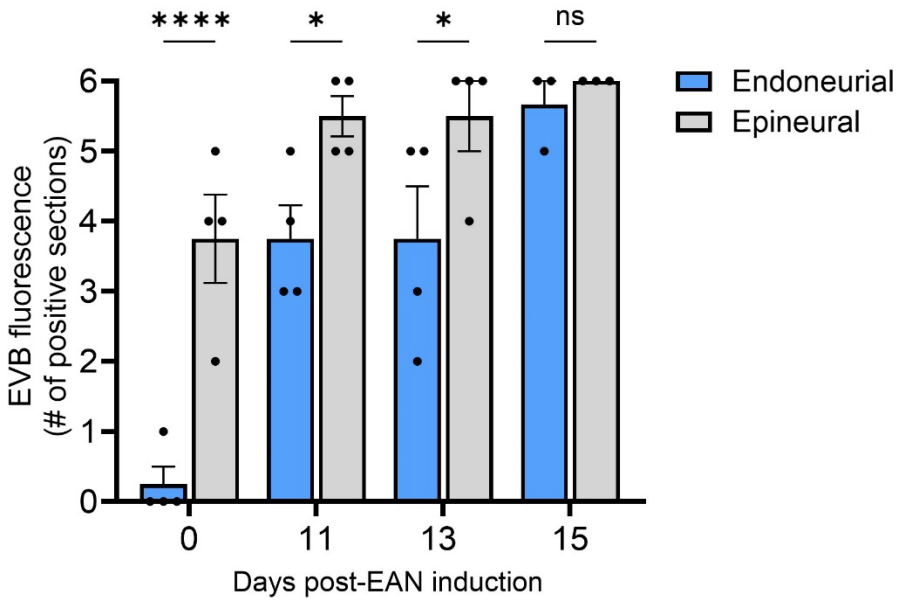
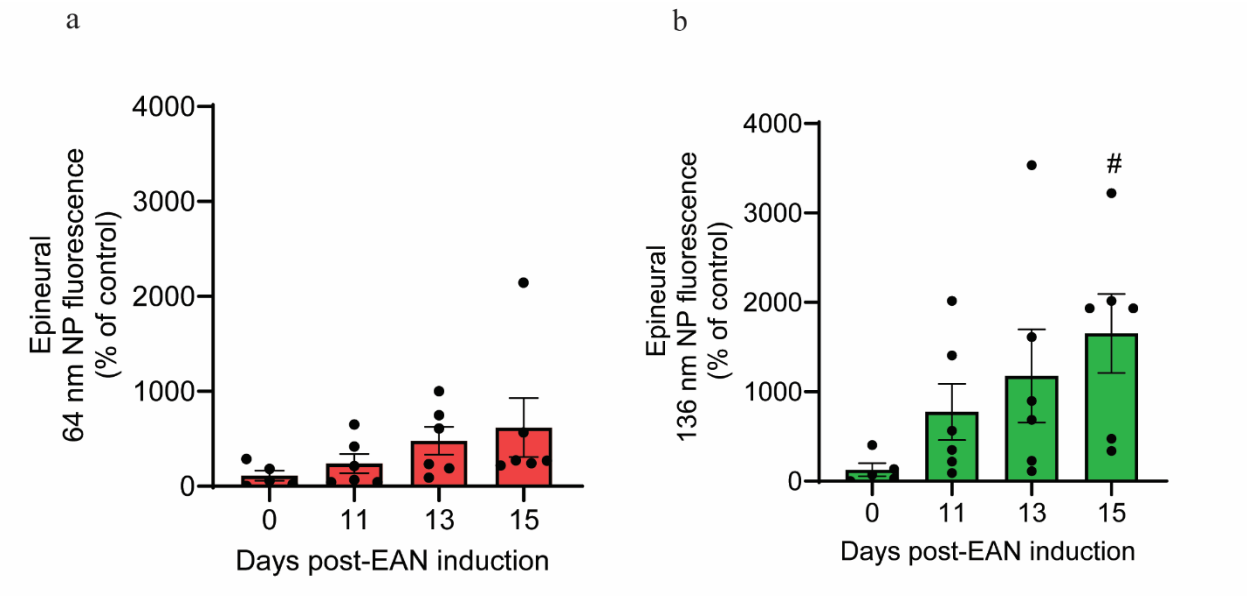
Supplementary Fig. S1.



Supplementary Fig. S1. Accumulation of a small molecule tracer in the epineurium and endoneurium over the course of EAN**.** Rats received a tail vein injection of Evans blue dye (EVB, 69 kDa) at key disease stages, and nerves were collected 30 minutes later. EVB permeation ($\lambda_{ex}/\lambda_{em}$ = 610/680 nm) in epi- and endoneurial compartments of transverse nerve sections was assessed. Data are reported as the number of nerve sections (out of 6 per rat) exhibiting positive staining in the respective compartment. Shown are the mean ± SEM, n=3-4 rats/group, ****$p<0.0001$, *$p<0.05$, Mixed effects analysis followed by Tukey's multiple comparison.

Supplementary Fig. S2



Supplementary Fig. S2. Accumulation of nanoparticle tracers in the epineurium over the course of EAN**.** Rats received a tail vein injection of a cocktail of **(a)** 64 nm and **(b)** 136 nm PEGylated NPs at key disease stages, and nerves were collected 30 minutes later. Epineural accumulation was quantified as: (fluorescence intensity of ROI containing entire fascicle) – (fluorescence intensity of ROI containing endoneurium only) and normalized to control (Day 0) fluorescence. Data shown are the mean ± SEM, n= 4-5 rat/group, #$p<0.05$ vs. Day 0, ordinary one-way ANOVA followed by Fisher's LSD multiple comparison.