Supplemental material

Reichenbach et al., https://doi.org/10.1084/jem.20171487

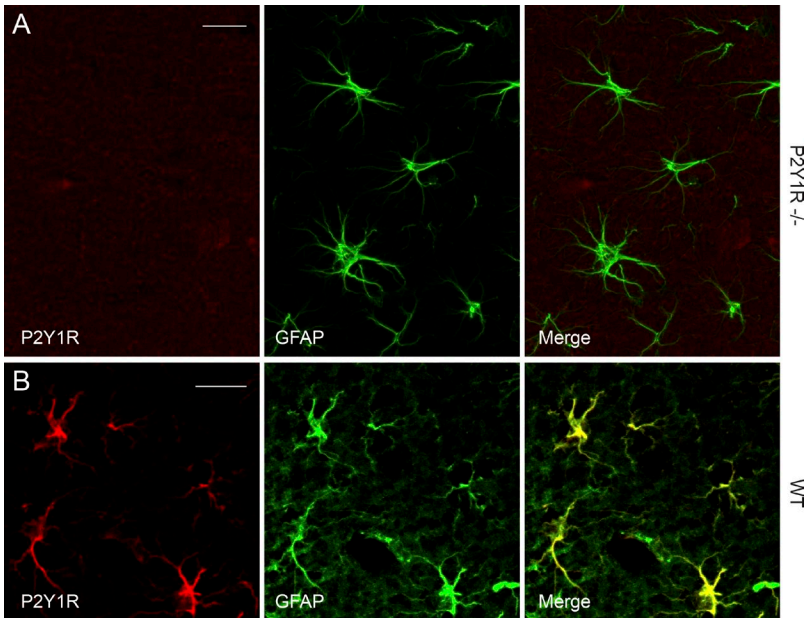


Figure S1. **Antibody validation using *P2y1r*$^{-/-}$ brains. (A and B)** The anti-P2Y1R antibody showed immunoreactivity for astrocytes, identified by anti-GFAP immunohistochemistry, in WT mice, but not astroglial immunoreactivity in *P2y1r*$^{-/-}$ mice. Bars, 20 µm.

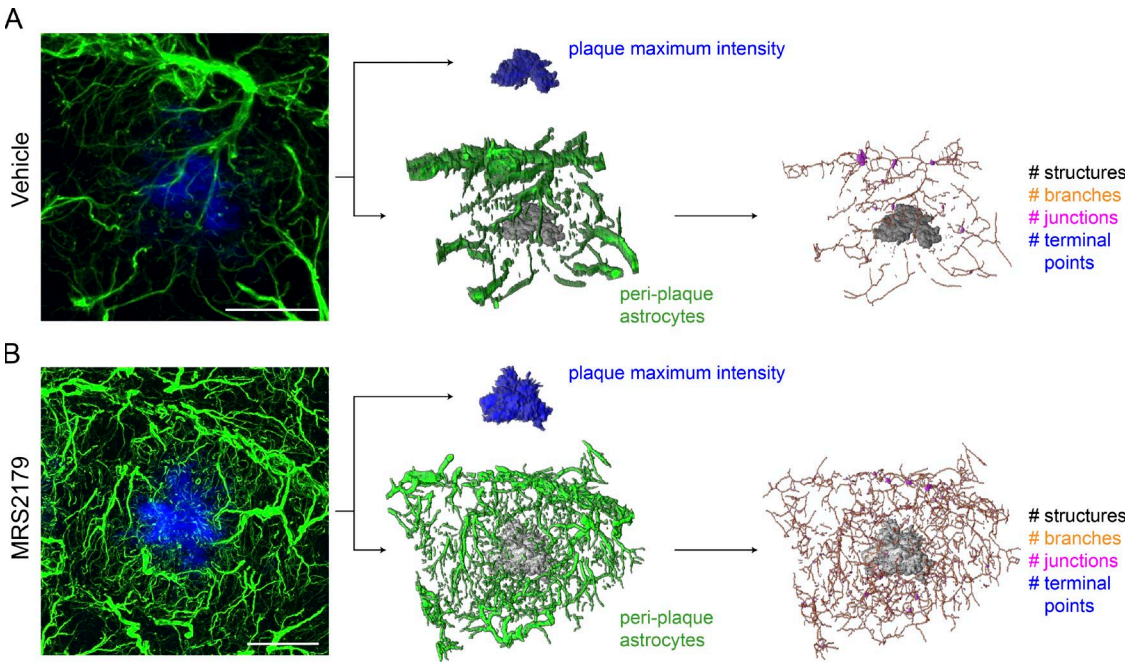
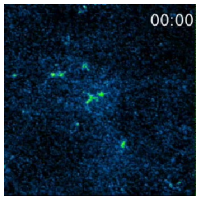


Figure S2. **Quantification of morphological barrier functions of periplaque astrocytes. (A and B)** Maximum-intensity projections were created from Z stacks of brain sections from vehicle-treated and MRS2179-treated mice. 3D objects of plaques and astrocytes were reconstructed after channel separation, image segmentation, and voxel size filtering. Plaque intensity and the number of periplaque astrocyte branches, their terminal points, the length and number of junctions of astrocyte segments, and the number of complex astrocytic structures was quantified. Bars, 20 µm.



Video 1. **Spontaneously active astrocytes in the hippocampus of an APPPS1 mouse.** Astrocytes were transfected with AAV encoding the fluorescent calcium indicator GCaMP6f under the astrocytic GfaABC1D promoter. The traces of astrocytic signals in this video are shown in Fig. 3 C.