Localization of gadolinium-loaded CPMV to sites of inflammation during central nervous system autoimmunity

Leah P. Shriver¹, Emily M. Plummer¹,² #, Diane M. Thomas¹, Samuel Ho¹, and Marianne Manchester¹,³

¹Skaggs School of Pharmacy and Pharmaceutical Sciences, University of California San Diego, La Jolla, California 92093
²Kellogg School of Science and Technology, The Scripps Research Institute, La Jolla, CA 92037
³To whom correspondence should be addressed: mmanchester@ucsd.edu

* authors contributed equally

#Current address: La Jolla Institute for Allergy and Immunology, La Jolla, California 92037
Supplementary Figure 1. EAE disease curve after MOG immunization. C57BL/6 mice were immunized with MOG35-55 in CFA with two injections of pertussis toxin (n = 4 mice / group). Mice receiving MOG (closed circles) display ascending paralysis compared to CFA controls (open circles). Data is displayed as mean ± SEM.
Supplementary Figure 2. Comparison of CPMV-Gd accumulation in kidney and liver of EAE animals. EAE was induced through subcutaneous immunization with MOG$_{35-55}$ followed by administration of pertussis toxin. When hind-limb paralysis was evident mice were injected with either PBS or 100 µg of CPMV-Gd and after 1 hour animals were sacrificed for examination of CPMV distribution by immunohistochemistry. A-C) Confocal images of kidney stained with anti-CPMV antibody followed by alexa fluor 555-conjugated anti-rabbit secondary and counterstained with DAPI. (A) no CPMV; (B) 100ug CPMV at 20X magnification; (C) 100ug CPMV at 100X magnification. (D-F) Confocal images of liver after injection of CPMV-Gd. Antibody staining of CPMV-Gd with rabbit anti-CPMV and an alexa fluor 555 conjugated anti-rabbit secondary along with DAPI nuclear counterstain. (D) no CPMV; (E) 100 µg CPMV at 20X magnification; (F) 100µg CPMV at 100X magnification.