

*Supplementary information for*

**Magnetic Resonance Imaging of Tumor-Associated-Macrophages (TAMs) with a Nanoparticle**

**Contrast Agent**

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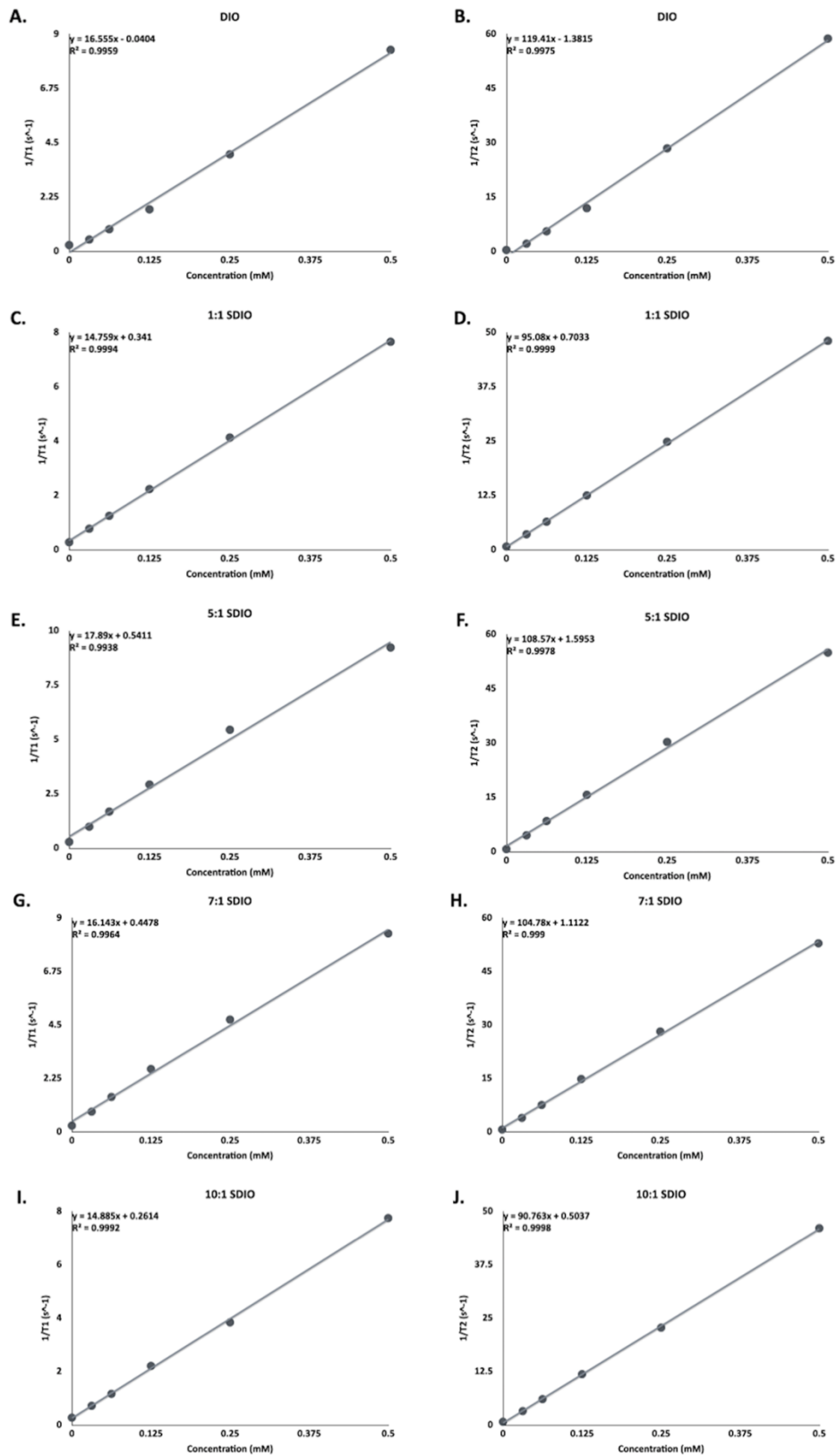


Figure S1. Longitudinal and transverse relaxivity plots at 1.4T for DIO (A and B), 1:1 SDIO (C and D), 5:1 SDIO (E and F), 7:1 SDIO (G and H) and 10:1 SDIO (I and J).

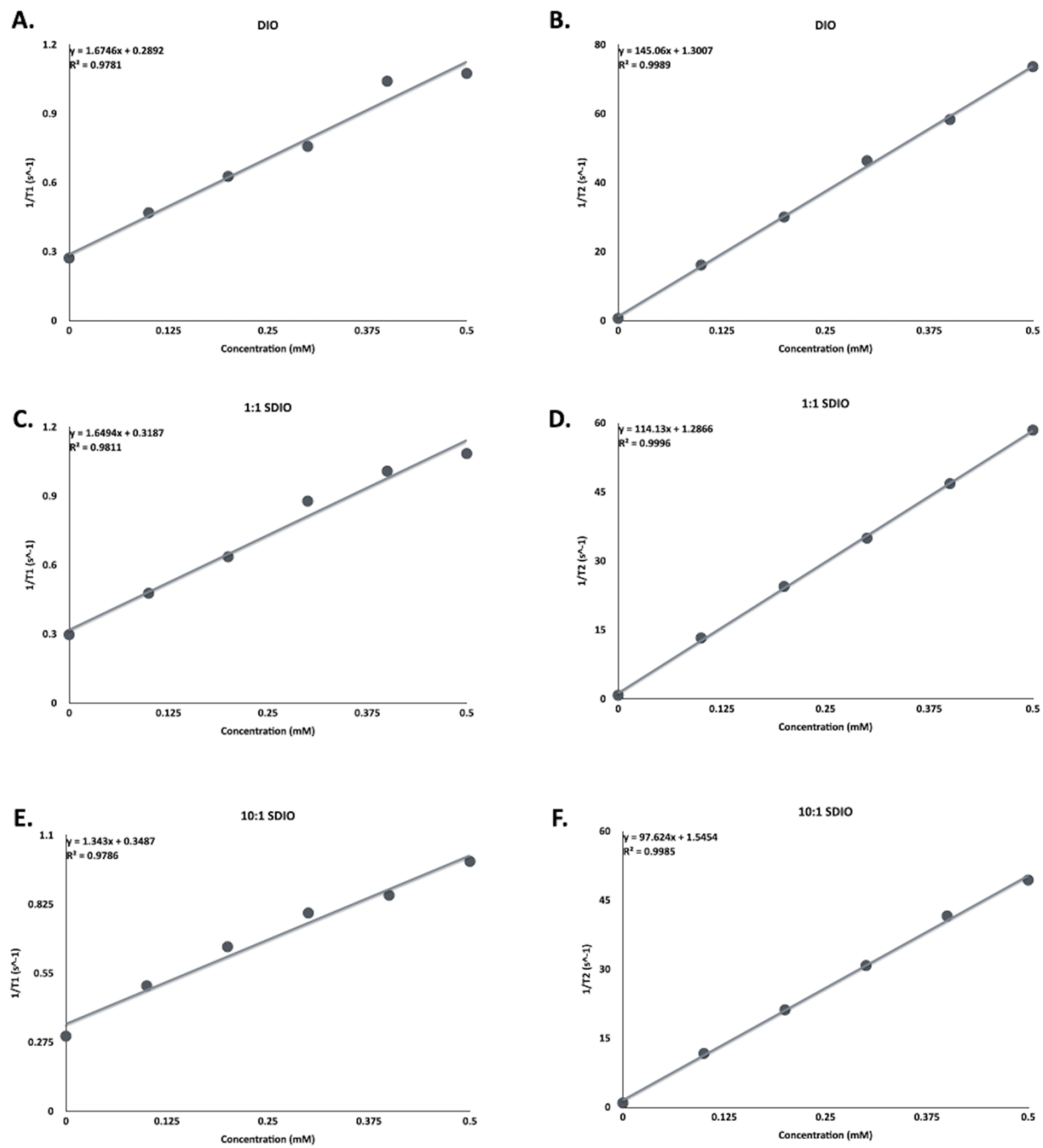
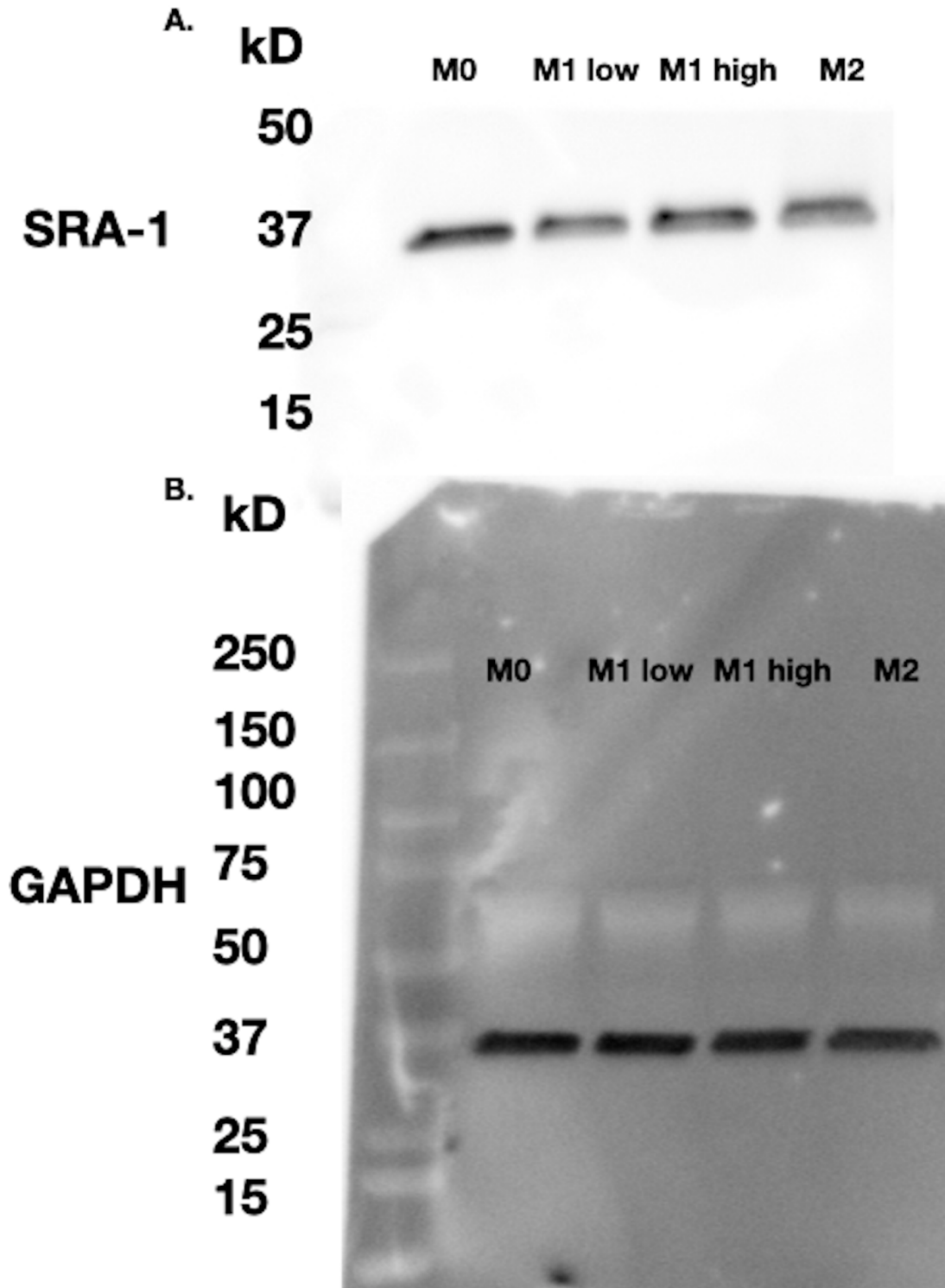
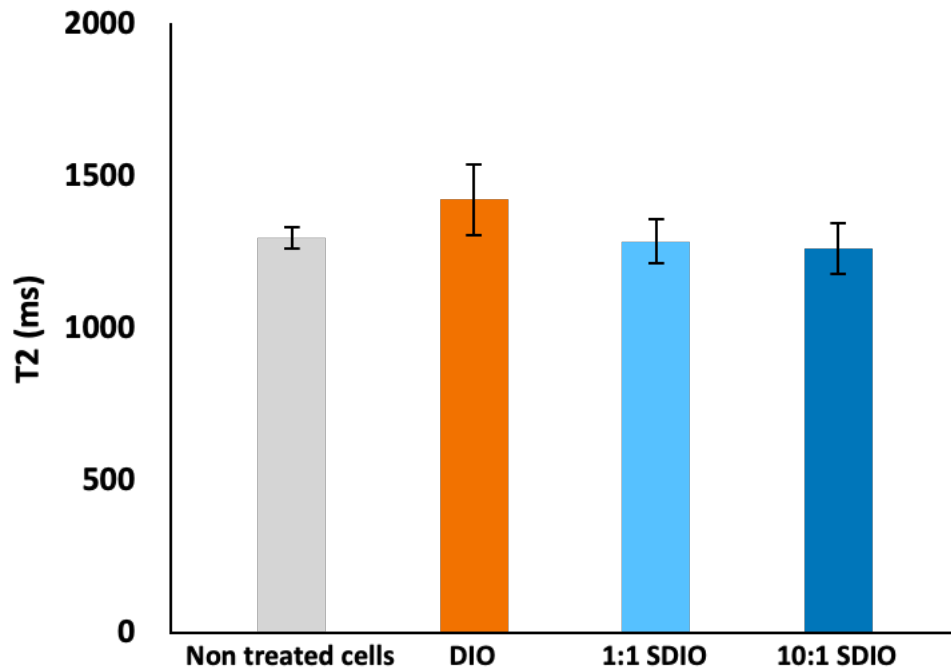


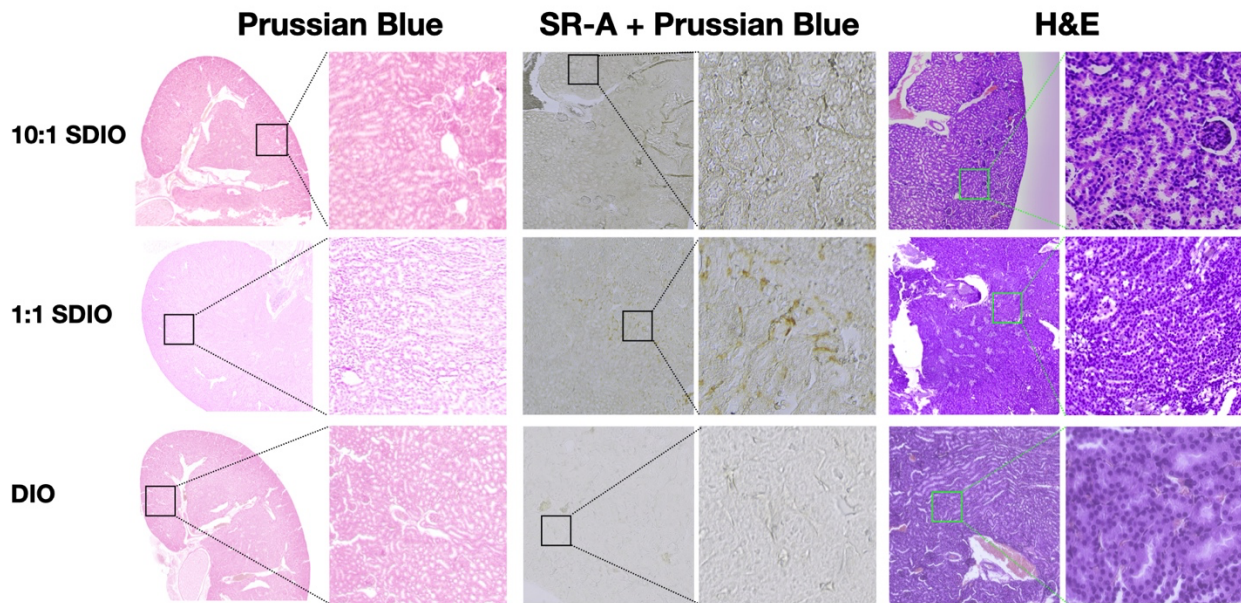
Figure S2. Longitudinal and transverse relaxivity plots at 7T for DIO (A and B), 1:1 SDIO (C and D), and 10:1 SDIO (E and F).



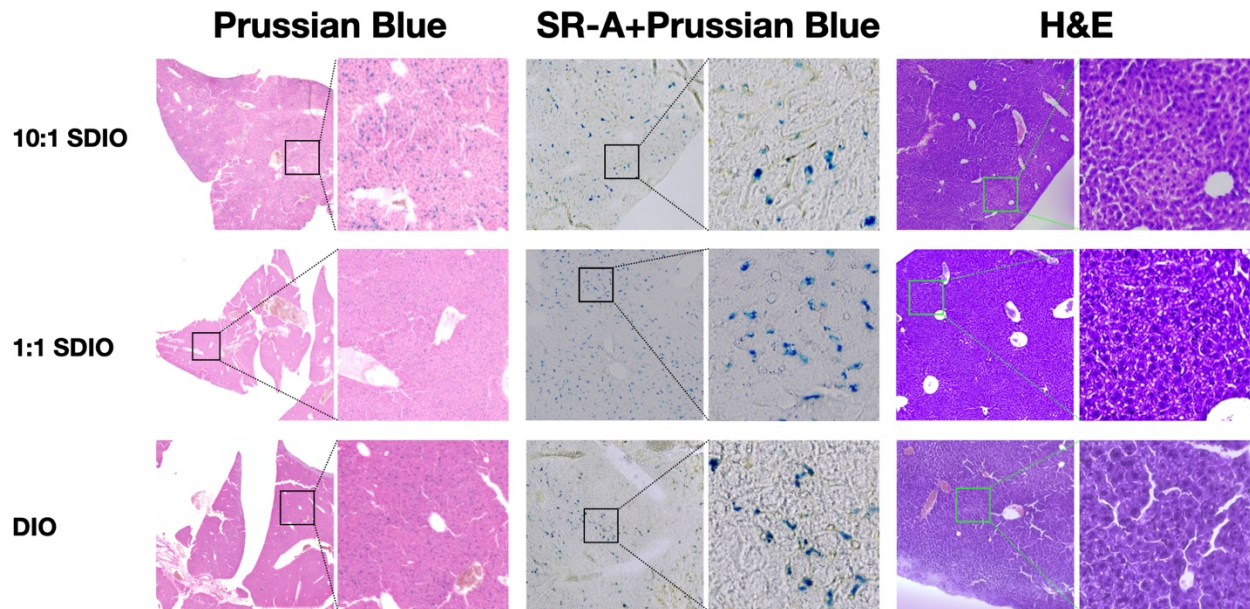
**Figure S3. Representative Immunoblot analysis of SRA-1 (A) and GAPDH (B) from bone marrow derived macrophages stimulated with the mentioned cytokines for 24 h. The sample landing was normalized using GAPDH, and SRA-1 and GAPDH were probed on different blots as they have similar molecular weights.**



**Figure S4. 4T1 cell uptake study. Mean T2 values of 4T1 cells lysates.** No differences were found between 10:1 SDIO, 1:1 SDIO treated cells compared to untargeted DIO and untreated control ( $P=0.18, 0.89; 0.28, 0.89$ , respectively).



**Figure S5. Representative histology and immunohistochemistry images of mouse kidney.** Bright-field H&E, CD204, and Prussian Blue staining for iron after 48 hours post-injection MR imaging. No iron was found in kidney, and the H&E staining shows a normal kidney tissue morphology.



**Figure S6. Representative histology and immunohistochemistry images of mouse liver.** Bright-field H&E, CD204, and Prussian Blue staining for iron after 48 hours post-injection MR imaging. Iron was highly accumulated in liver, and the H&E staining shows a normal liver tissue morphology.