

Supplemental Materials

A specific and adaptable approach to track CD206⁺ macrophages by molecular MRI and fluorescence imaging

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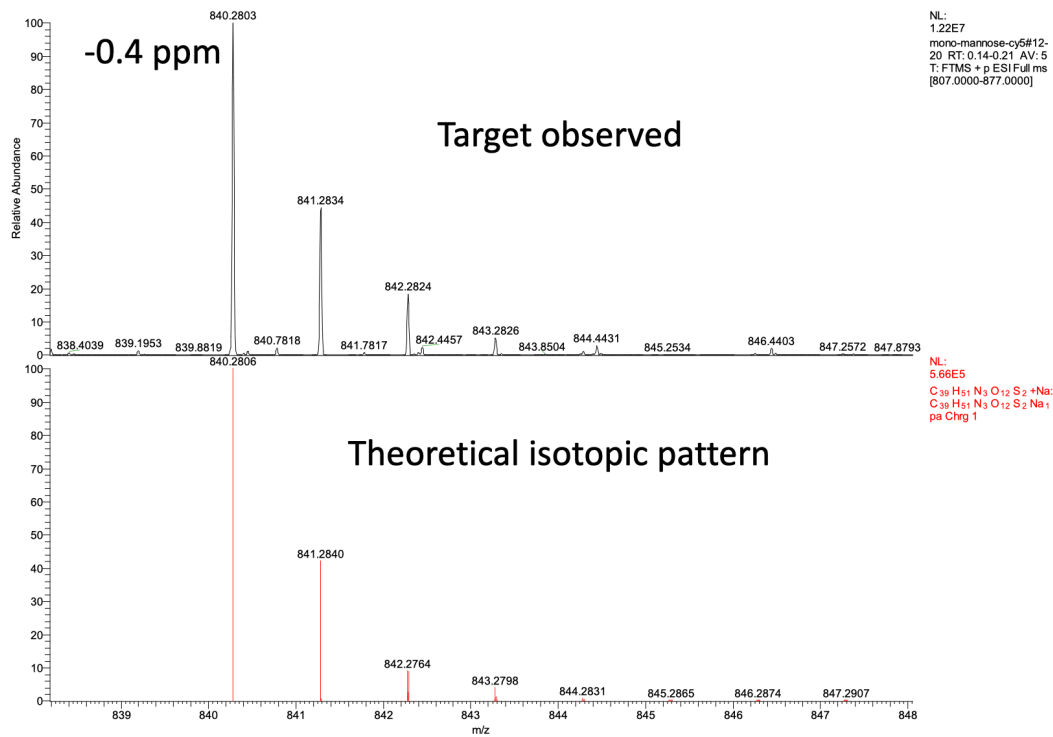


Figure S1. High resolution mass spectrometry (HR-MS) of MR1-cy5.

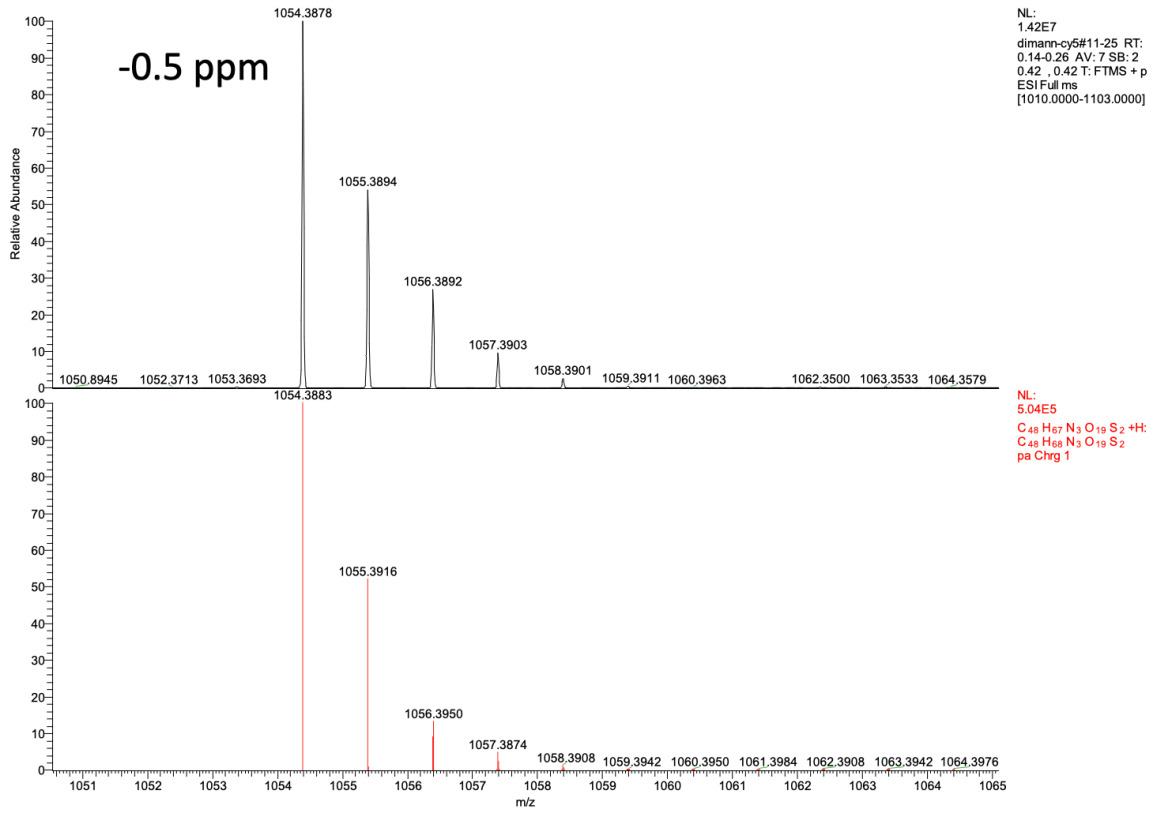


Figure S2. High resolution mass spectrometry (HR-MS) of MR2-cy5.

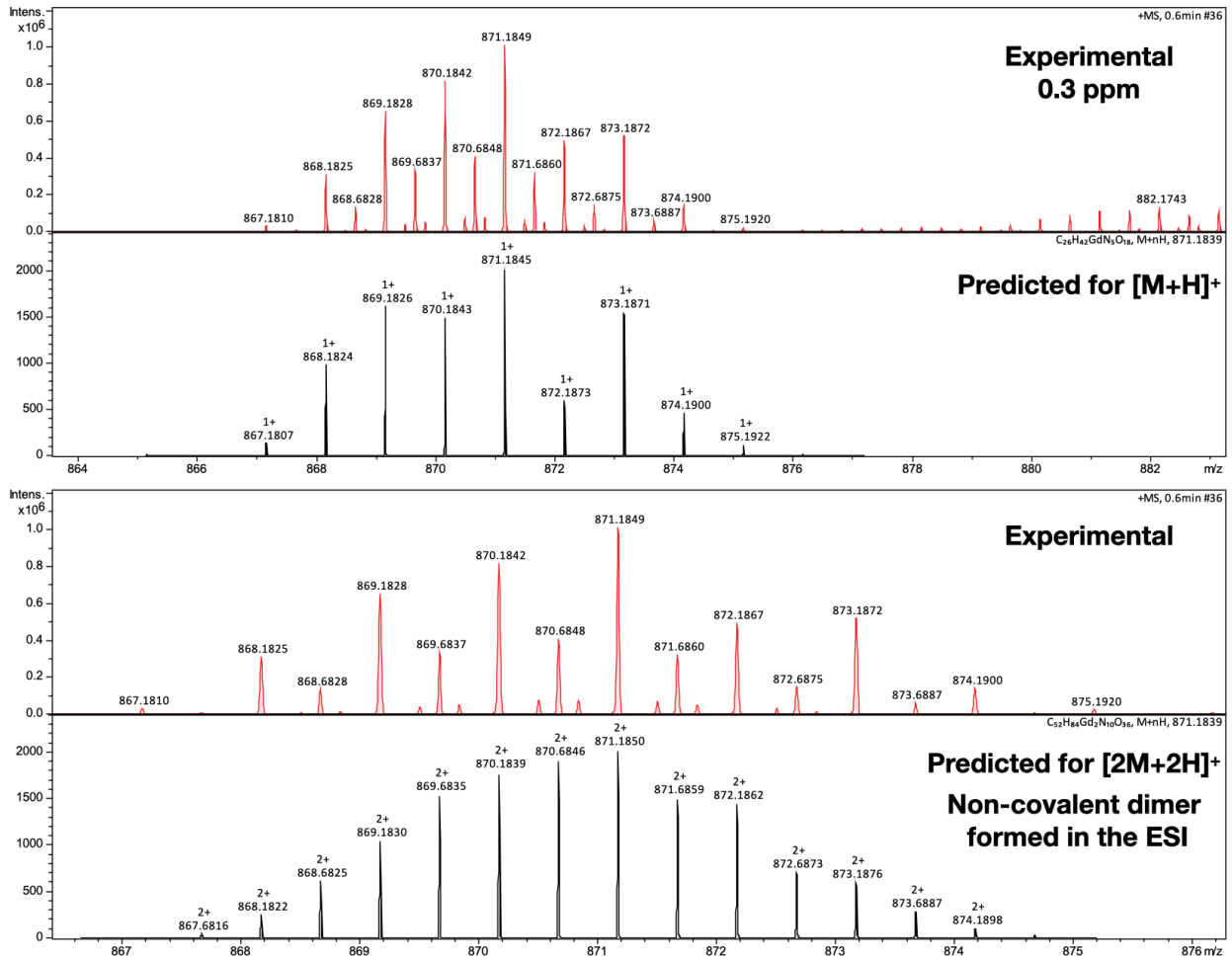


Figure S3. High resolution mass spectrometry (HR-MS) of Mann2-DTPA-Gd.

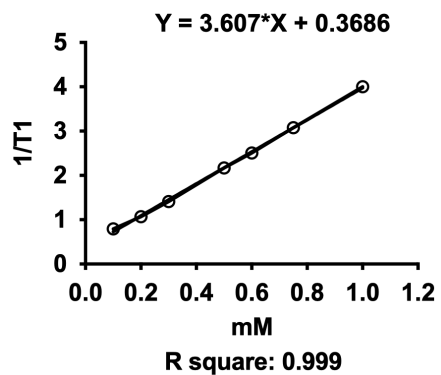


Figure S4: Relaxivity (r_1) of Mann2-DTPA-Gd.

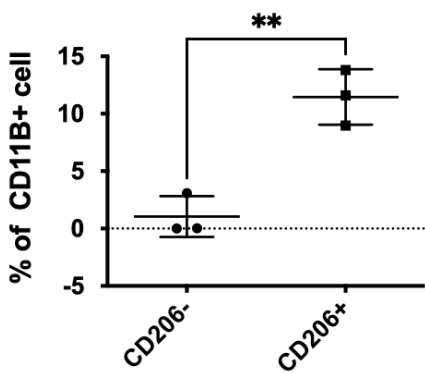
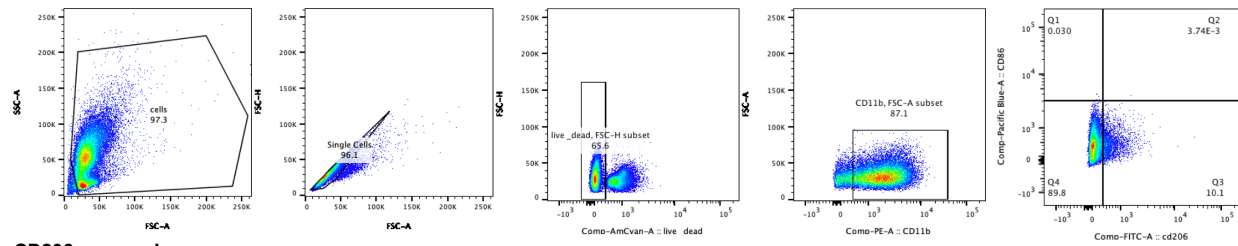


Figure S5. Validation of the differentiation of CD206⁺ and CD206⁻ macrophages using IFN-gamma and IL-4, respectively, from RAW 264.7 cells by flow cytometry (n = 3, unpaired t-test, **, p = 0.0038).

CD206+ macrophages



CD206- macrophages

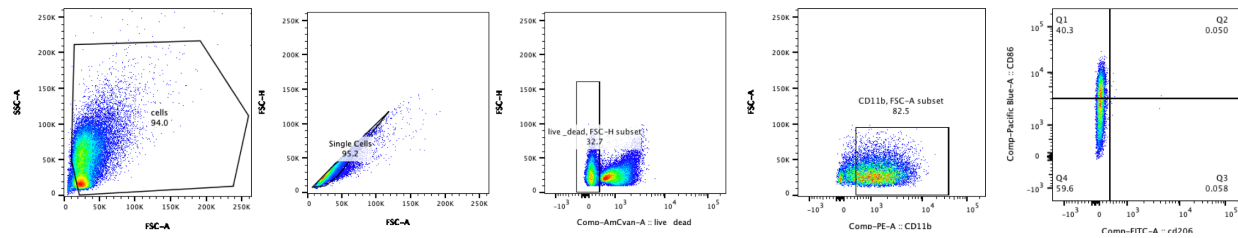


Fig. S6. Gating strategy for the differentiation RAW cells to CD206⁺ and CD206⁻ macrophages.

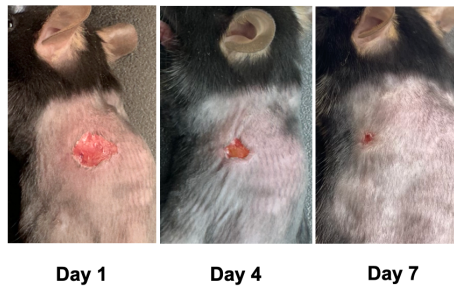


Figure S7. Mouse model of wound healing on days 1, 4, and 7.

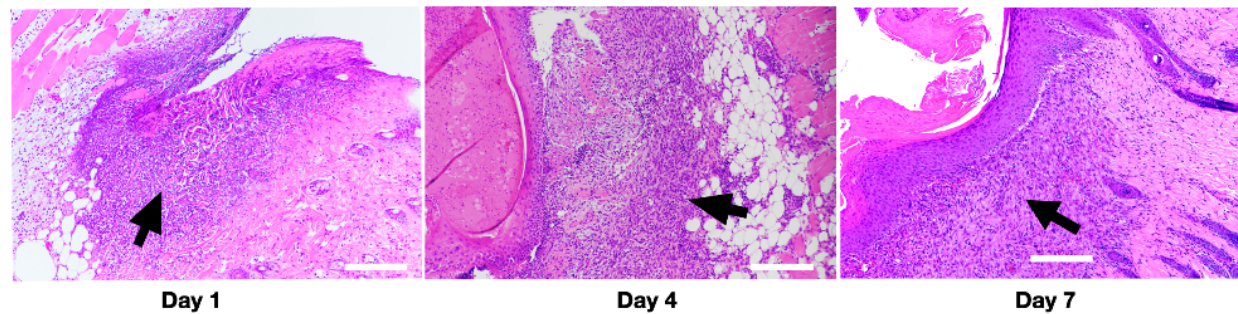


Figure S8. H&E staining of wound tissues on days 1, 4, and 7. The arrows indicate the infiltrated immune cells around the wound areas. Images: 10x, scale is 100 μ m.

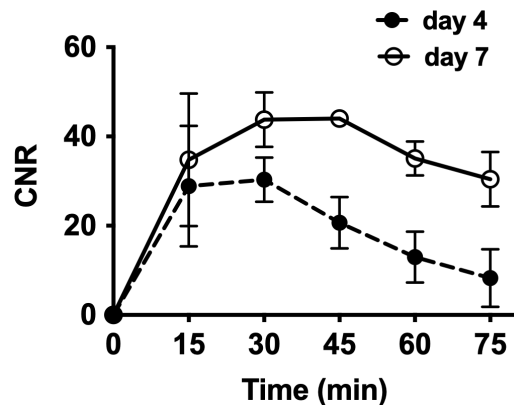


Figure S9: Contrast-to-noise ratio (CNR) of wildtype mouse at 45 min post-injection on day 7 was about 2- to 3-fold higher compared to that on day 4 after wound injury.

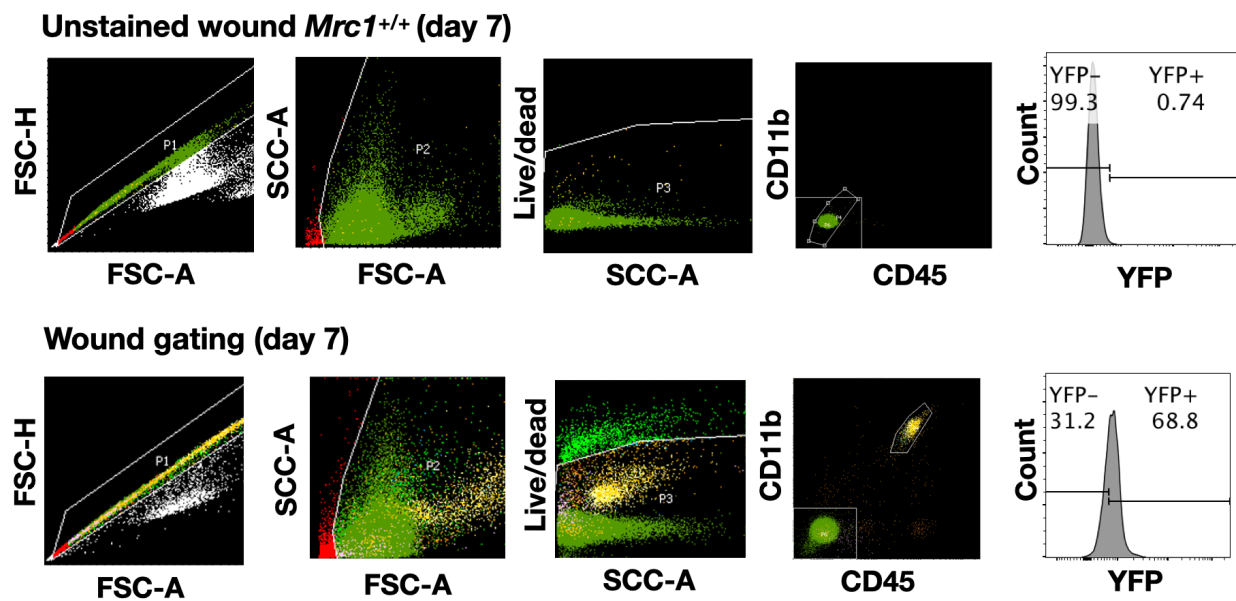


Figure S10. Gating strategy for flow cytometric analysis in the wound healing model.

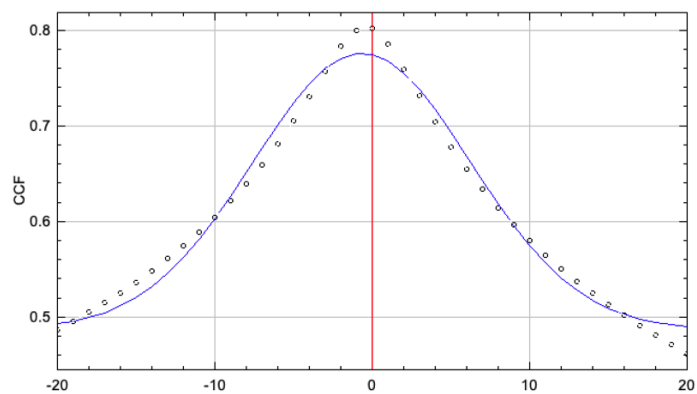


Figure S11. Van Steensel's cross-correlation function (CCF) between CD206 and MR2-cy5 in stroke.

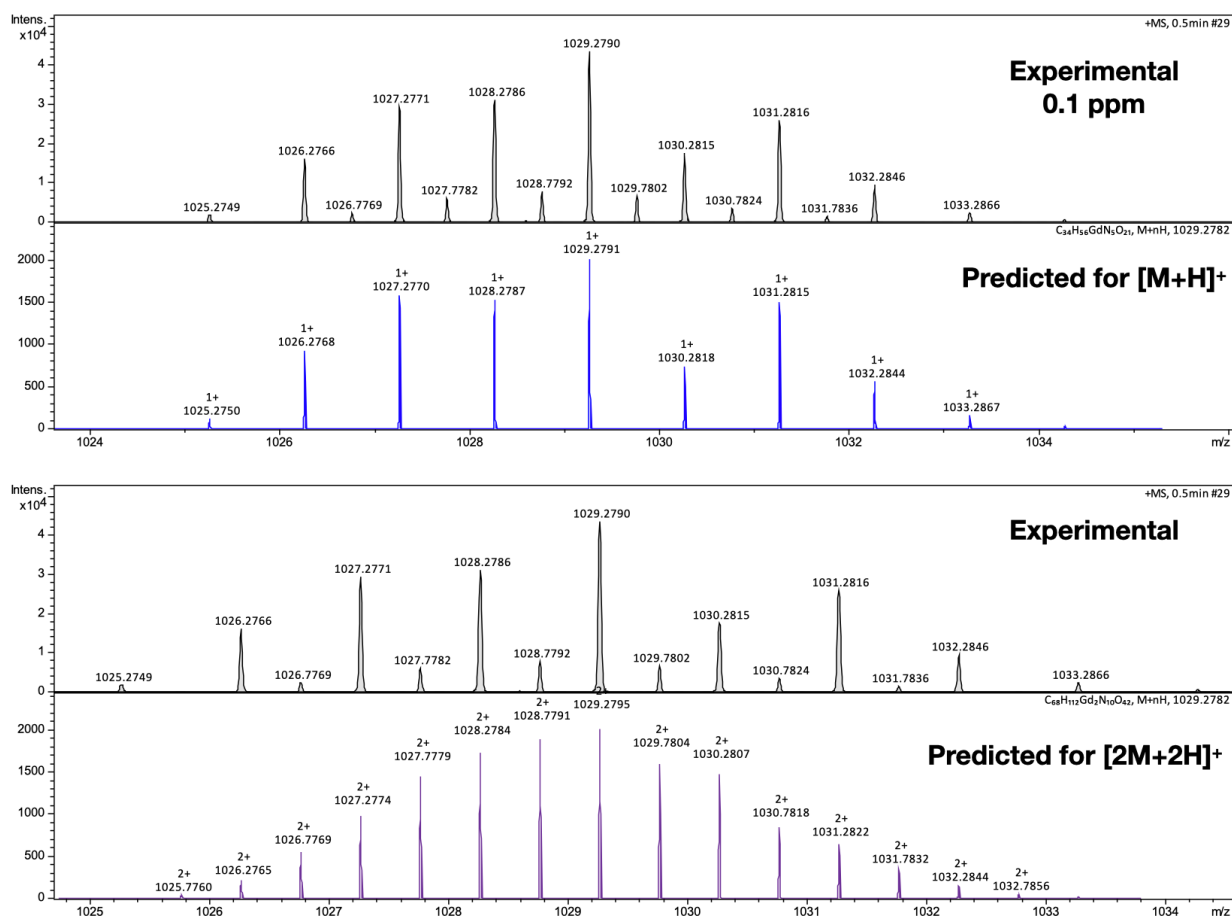


Figure S12. High resolution mass spectrometry (HR-MS) of MannGdFish.

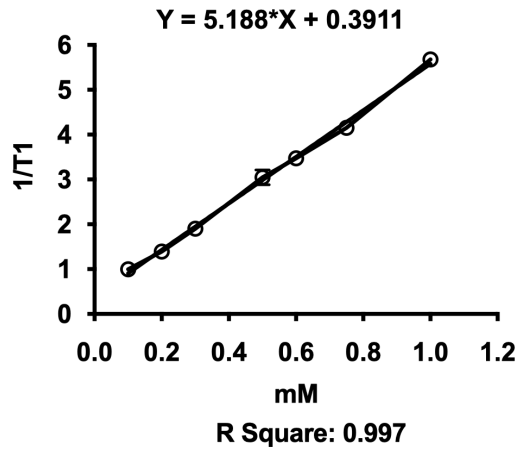


Figure S13: Relaxivity (r_1) of MannGdFish.

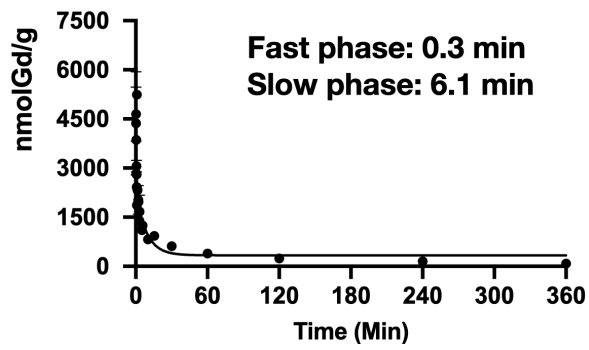


Figure S14: Blood half-life of MannGdFish detected by ICP-MS using a two-way exponential model was 0.3 min for the fast phase and 6.1 min for the slow phase.