Supplemental Data

Figure S1

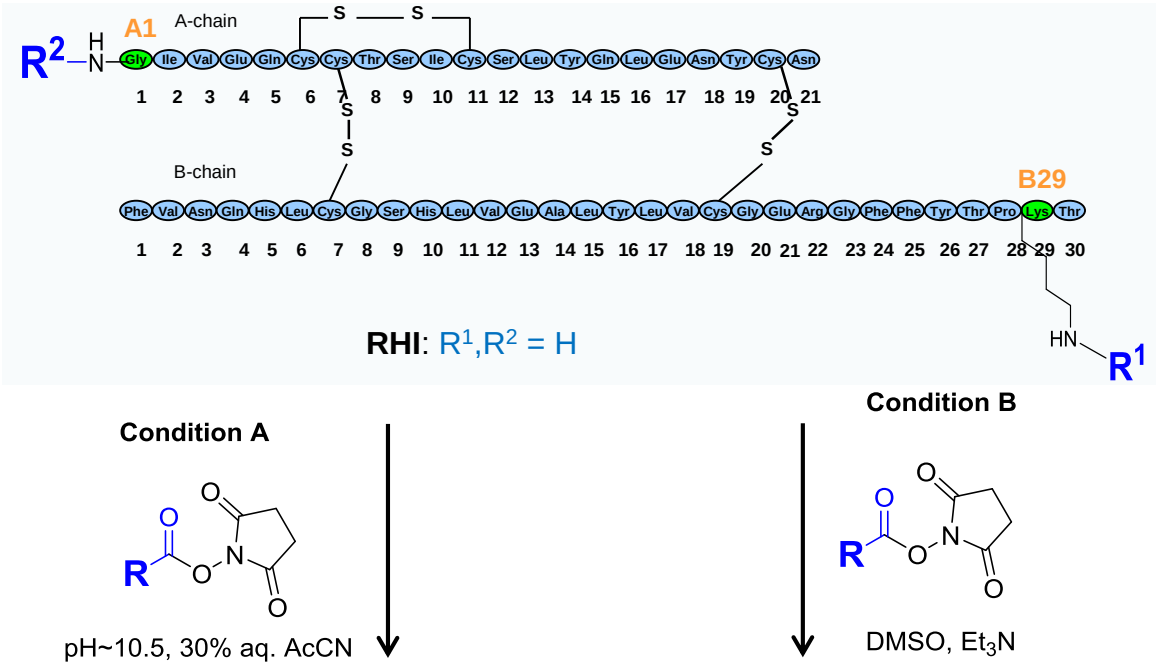

Figure S1. GRI Synthesis Scheme 1

GRI1, GRI2 and GRI3 can be synthesized under anhydrous conditions or aqueous conditions, leading to A1, B29 bis-conjugation and B29 mono-conjugation, respectively (see **Figure 1A** for structures of sugar clusters)

Figure S2

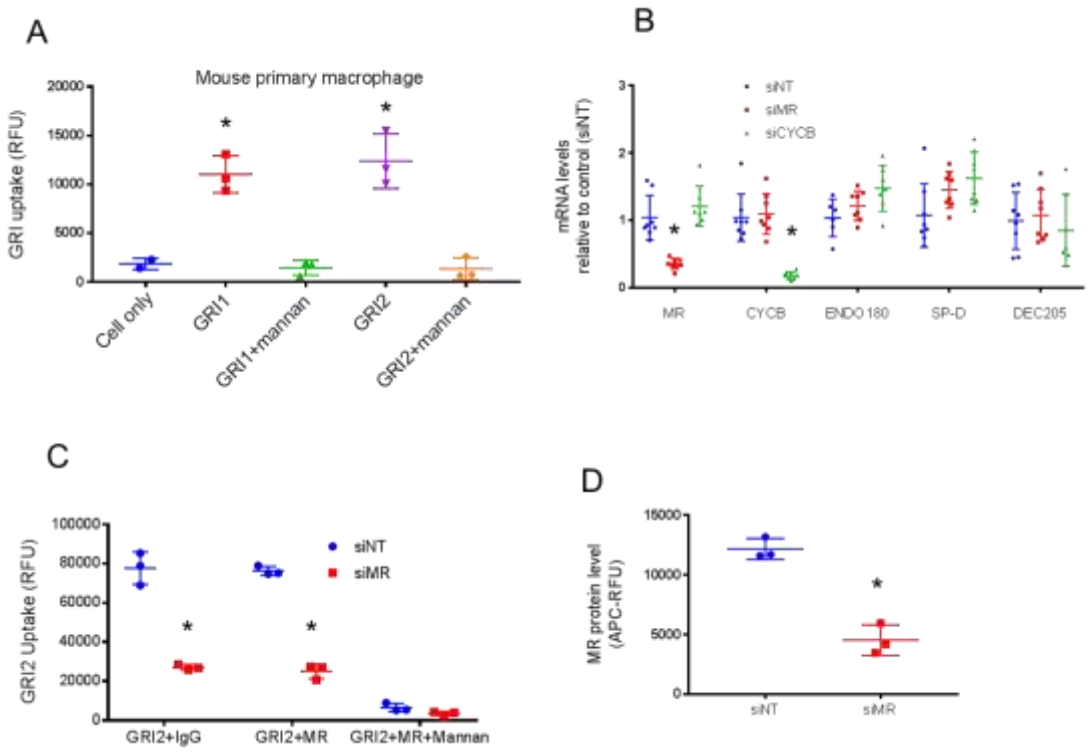

Figure S2. GRI Uptake Mediated by MR in Macrophage Cells

(**A**) GRI1 and GRI2 uptake assay was performed in primary mouse macrophages by MCSF-induced monocytes differentiation. N=2-3 per group. *p<0.05 Corresponding GRI vs. GRI + mannan by Student's T test. (**B**) Knockdown of mannose receptor by siRNA did not change levels of other lectins in rat NR8383 macrophages. N=6-8 per group. *p<0.05 vs. siRNA control (siNT) by Student's T test. (**C-D**) GRI2 uptake assay in response to siRNA induced mannose receptor knockdown was performed in human primary macrophages by MCSF-induced monocytes differentiation. Human MR siRNA transfection resulted in a 60% reduction of MR membrane levels compared to non-targeting siRNA control, and this corresponded to a 70% reduction of GRI2 uptake. Membrane MR levels were measured by flow cytometry using APC-

labeled MR antibodies. N=3 per group. *$p<0.05$ vs. siRNA control (siNT) by Student's T test. Results are shown as mean ± SD of values and represent 2-3 independent experiments.