Supplementary Figure 1. Confirmation of antibody-

deglycosylation. SDS-PAGE (panel A) and mass spectrometry analysis (panel B) of deglycosylated 34-1-2S and SF1.1.10. Untreated antibodies are used as controls.

Supplementary Figure 2. Confirmation of Fab-fragment generation. Non-reducing SDS-PAGE demonstrating Fab fragment sizes of 34-1-2S and SF1.1.10. Full-length (untreated) antibodies are used as controls.

Supplementary Figure 3. Deglycosylated antibodybinding to murine FcqRs. Binding of deglycosylated 34-1-2S, SF1.1.10 and AF6-88.5.5.3 to murine FcqRI, FcqRIIb, FcqRIII, and FcqRIV as investigated using SPR. Dashed lines indicate binding of untreated antibodies (from Figure 4).

Supplementary Figure 4. Antibody-Fab fragement binding to murine FcqRs. Fab-fragment binding of 34-1-2S, SF1.1.10 and AF6-88.5.5.3 to murine FcqRI, FcqRIIb, FcqRIII, and FcqRIV as investigated using SPR.

Supplementary Figure 5. Mass spectrometry readout example of antibody glycopepetide structure.

Α



В

| Fc-deglycosylation (%) | 34-1-28 | Deglycosylated 34-1-2S |
|------------------------|---------|------------------------|
| DeGlyc - GlcNAc + Fuc | 0.02 | 93.16 |

| Fc-deglycosylation (%) | SF1.1.10 | Deglycosylated SF1.1.10 |
|------------------------|----------|-------------------------|
| DeGlyc - GlcNAc + Fuc | 0.27 | 89.86 |









