Supplementary Figures









Arrows indicate the migrations of peaks following exoglycosidase digestion and HILIC UPLC analysis A. Undigested Fc γ RIIa _{His131} glycan profile B. *Arthrobacter ureafaciens* sialidase (ABS) C. bovine testes β -galactosidase (BTG) D. bovine kidney α -fucosidase (BKF), E. jack bean β -N-acetylhexosaminidase (JBH), F. jack bean α mannosidase (JBM). Peaks migrate to Man₁ structures following digestion.





Arrows indicate the migrations of peaks following exoglycosidase digestion and HILIC UPLC analysis A. Undigested Fc γ RIIb glycan profile B. *Arthrobacter ureafaciens* sialidase (ABS) C. bovine testes β -galactosidase (BTG) D. bovine kidney α -fucosidase (BKF), E. jack bean β -N-acetylhexosaminidase (JBH), F. jack bean α mannosidase (JBM). Peaks migrate to Man₁ structures following digestion



Figure 4. Exoglycosidase sequencing of the FcyRIIIa Phe158 N-glycans

Arrows indicate the migrations of peaks following exoglycosidase digestion and HILIC UPLC analysis A. Undigested Fc γ RIIIa _{Phe158} glycan profile B. Arthrobacter ureafaciens sialidase (ABS) C. bovine testes β -galactosidase (BTG) D. bovine kidney α -fucosidase (BKF), E. jack bean β -N-acetylhexosaminidase (JBH), F. jack bean α mannosidase (JBM). Peaks migrate to Man₁ structures following digestion.





Arrows indicate the migrations of peaks following exoglycosidase digestion and HILIC UPLC analysis A. Undigested Fc γ RIIIa _{Val158} glycan profile B. Arthrobacter ureafaciens sialidase (ABS) C. bovine testes β -galactosidase (BTG) D. bovine kidney α -fucosidase (BKF), E. jack bean β -N-acetylhexosaminidase (JBH), F. jack bean α mannosidase (JBM). Peaks migrate to Man₁ structures following digestion



Figure 6. Mass spectrometry (UPLC/ESI-MS) identification of the N-glycan FA1 from $\mathsf{Fc}\gamma\mathsf{Rs}$



Figure 7. Mass spectrometry (UPLC/ESI-MS) identification of the N-glycan A2G2 from $\mathsf{Fc}\gamma\mathsf{Rs}$



Figure 8. Mass spectrometry (UPLC/ESI-MS) identification of the N-glycans Man4A1 and A2G1 from $Fc\gamma Rs$



Figure 9. Mass spectrometry (UPLC/ESI-MS) identification of the N-glycans Man4A1 and A2G1 from $Fc\gamma Rs$



Figure 10. Mass spectrometry (UPLC/ESI-MS) identification of the N-glycans Man5, FMan4A1 and FA1G1 from FcyRs



Figure 11. Mass spectrometry (UPLC/ESI-MS) identification of the N-glycan A1Lac1 from $Fc\gamma Rs$



Figure 12. Mass spectrometry (UPLC/ESI-MS) identification of the N-glycan FA3 from $Fc\gamma Rs$



Figure 13. Mass spectrometry (UPLC/ESI-MS) identification of the N-glycan FA2(6)G1 from $Fc\gamma Rs$



Figure 14. Mass spectrometry (UPLC/ESI-MS) identification of the N-glycan FA2(3)G1 from Fc γ Rs



Figure 15. Mass spectrometry (UPLC/ESI-MS) identification of the N-glycans Man6 and FA4 from $Fc\gamma Rs$



Figure 16. Mass spectrometry (UPLC/ESI-MS) identification of the N-glycans Man7 and FMan4A1G1 from $Fc\gamma Rs$



Figure 17. Mass spectrometry (UPLC/ESI-MS) identification of the N-glycan A2G2 from $Fc\gamma Rs$



Figure 18. Mass spectrometry (UPLC/ESI-MS) identification of the N-glycan FA1G1S1 from $Fc\gamma Rs$



Figure 19. Mass spectrometry (UPLC/ESI-MS) identification of the N-glycan FA3G1 from $\mathsf{Fc}\gamma\mathsf{Rs}$



Figure 20.. Mass spectrometry (UPLC/ESI-MS) identification of the N-glycan FA2G1 from $Fc\gamma Rs$



Figure 21. Mass spectrometry (UPLC/ESI-MS) identification of the N-glycan FA2G1S1 from $Fc\gamma Rs$



Figure 22. Mass spectrometry (UPLC/ESI-MS) identification of the N-glycans FA2G2 and FA2G1S1 from $Fc\gamma Rs$







Figure 24. Mass spectrometry (UPLC/ESI-MS) identification of the N-glycans Man7 and FA4G1 from Fc γ Rs



Figure 25. Mass spectrometry (UPLC/ESI-MS) identification of the N-glycans Man7 and FA3G1S1 from $Fc\gamma Rs$



Figure 26. Mass spectrometry (UPLC/ESI-MS) identification of the N-glycan FMan4G1S1 from Fc γ Rs



Figure 27. Mass spectrometry (UPLC/ESI-MS) identification of the N-glycan FA3G2 from $Fc\gamma Rs$



Figure 28. Mass spectrometry (UPLC/ESI-MS) identification of the N-glycan FA3G2 from $\mathsf{Fc}\gamma\mathsf{Rs}$



Figure 29. Mass spectrometry (UPLC/ESI-MS) identification of the N-glycan FA2G2S1 from $Fc\gamma Rs$



Figure 30. Mass spectrometry (UPLC/ESI-MS) identification of the N-glycan FA4G1S1 from $Fc\gamma Rs$



Figure 31. Mass spectrometry (UPLC/ESI-MS) identification of the N-glycan FMan5A1G1S1 from Fc γ Rs







Figure 33. Mass spectrometry (UPLC/ESI-MS) identification of the N-glycan FA3G3 from $Fc\gamma Rs$



Figure 34. Mass spectrometry (UPLC/ESI-MS) identification of the N-glycan FAG3 from $Fc\gamma Rs$



Figure 35. Mass spectrometry (UPLC/ESI-MS) identification of the N-glycan FA2G2S2 from $Fc\gamma Rs$



Figure 36. Mass spectrometry (UPLC/ESI-MS) identification of the N-glycan FA4G3 from $\mathsf{Fc}\gamma\mathsf{Rs}$



Figure 37. Mass spectrometry (UPLC/ESI-MS) identification of the N-glycan FA3G2S2 from $Fc\gamma Rs$



Figure 33. Mass spectrometry (UPLC/ESI-MS) identification of the N-glycans FA3G3S1 and FA2G2Lac1S1 from $Fc\gamma Rs$



Figure 38. Mass spectrometry (UPLC/ESI-MS) identification of the N-glycans FA3G3S1 and FA2G2Lac1S1 from $Fc\gamma Rs$



Figure 38. Mass spectrometry (UPLC/ESI-MS) identification of the N-glycan FA2G2Lac2 from $Fc\gamma Rs$



Figure 40. Mass spectrometry (UPLC/ESI-MS) identification of the N-glycan FA2G2Lac2 from $Fc\gamma Rs$



Figure 41. Mass spectrometry (UPLC/ESI-MS) identification of the N-glycan FA3G3S2 from $Fc\gamma Rs$



Figure 42. Mass spectrometry (UPLC/ESI-MS) identification of the N-glycan FA4G4S1 from $Fc\gamma Rs$









Figure 44. Mass spectrometry (UPLC/ESI-MS) identification of the N-glycan FA3G3S3 from $Fc\gamma Rs$

Figure 45. Mass spectrometry (UPLC/ESI-MS) identification of the N-glycan FA4G4Lac1 from $Fc\gamma Rs$



Figure 46. Mass spectrometry (UPLC/ESI-MS) identification of the N-glycan FA4G4S2 from $Fc\gamma Rs$



Figure 47. Mass spectrometry (UPLC/ESI-MS) identification of the N-glycan FA4G4Lac1S1 from $Fc\gamma Rs$



Figure 48. Mass spectrometry (UPLC/ESI-MS) identification of the N-glycan FA4G4S3 from $\mathsf{Fc}\gamma\mathsf{Rs}$



Figure 49. Mass spectrometry (UPLC/ESI-MS) identification of the N-glycan FA4G4S4 from Fc γ Rs



Figure 50. Mass spectrometry (UPLC/ESI-MS) identification of the N-glycan FA4G4Lac1S3 from Fc γ Rs



Figure 51. Mass spectrometry (UPLC/ESI-MS) identification of the N-glycan FA4G4Lac2S3 from Fc γ Rs



Figure 52. Mass spectrometry (UPLC/ESI-MS) identification of the N-glycan FA4G4Lac2S4 from Fc γRs