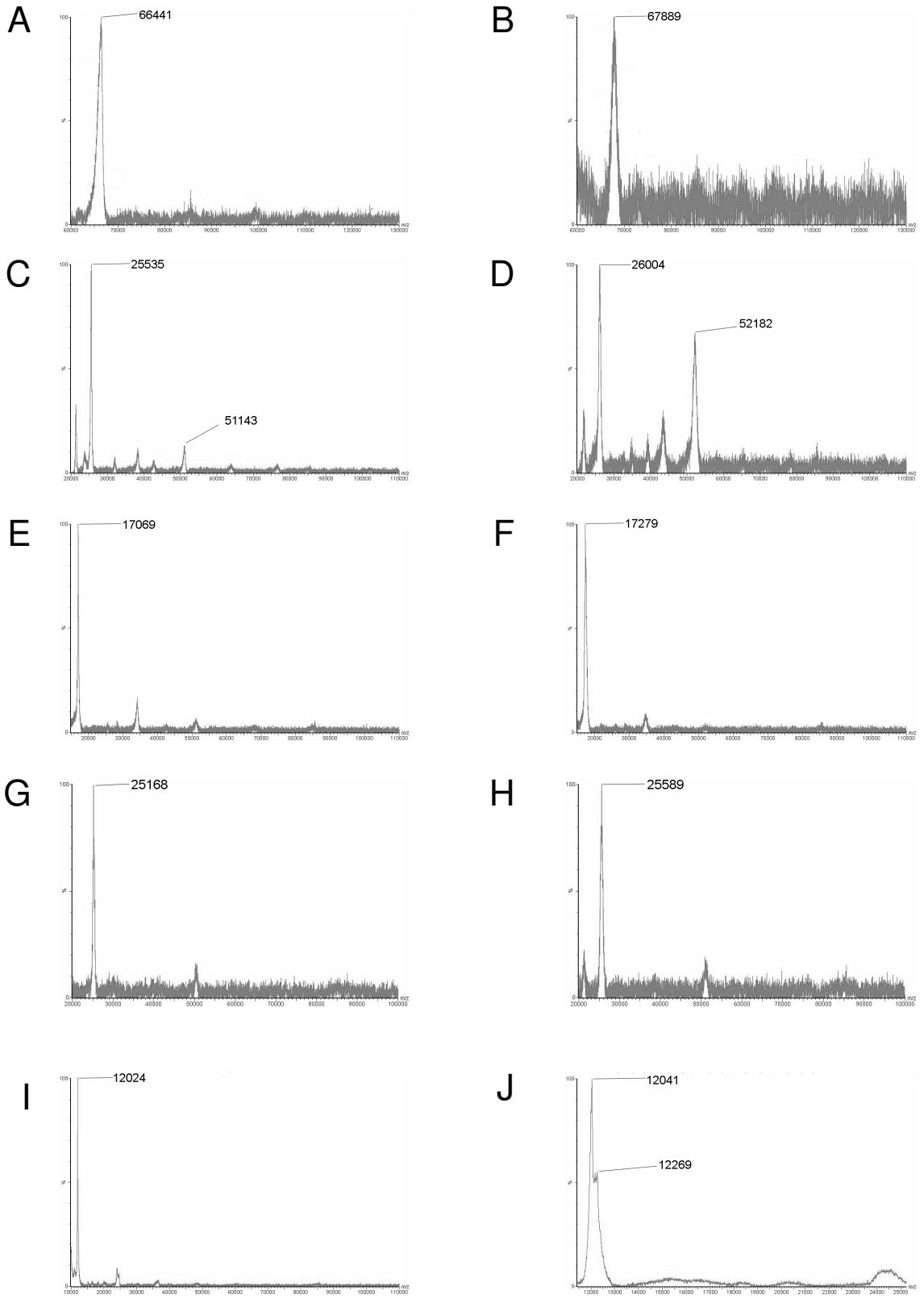

Figure S1. MALDI spectra of native and Sulfo-SMCC-derivatives of proteins in Table 1. A, C, E, G, and I are native protein; B, D, F, H, and J are Sulfo-SMCC derivatives. A, B: BSA. C, D: ConA. E, F: WGA. G, H: PNA. I, J: GNA.

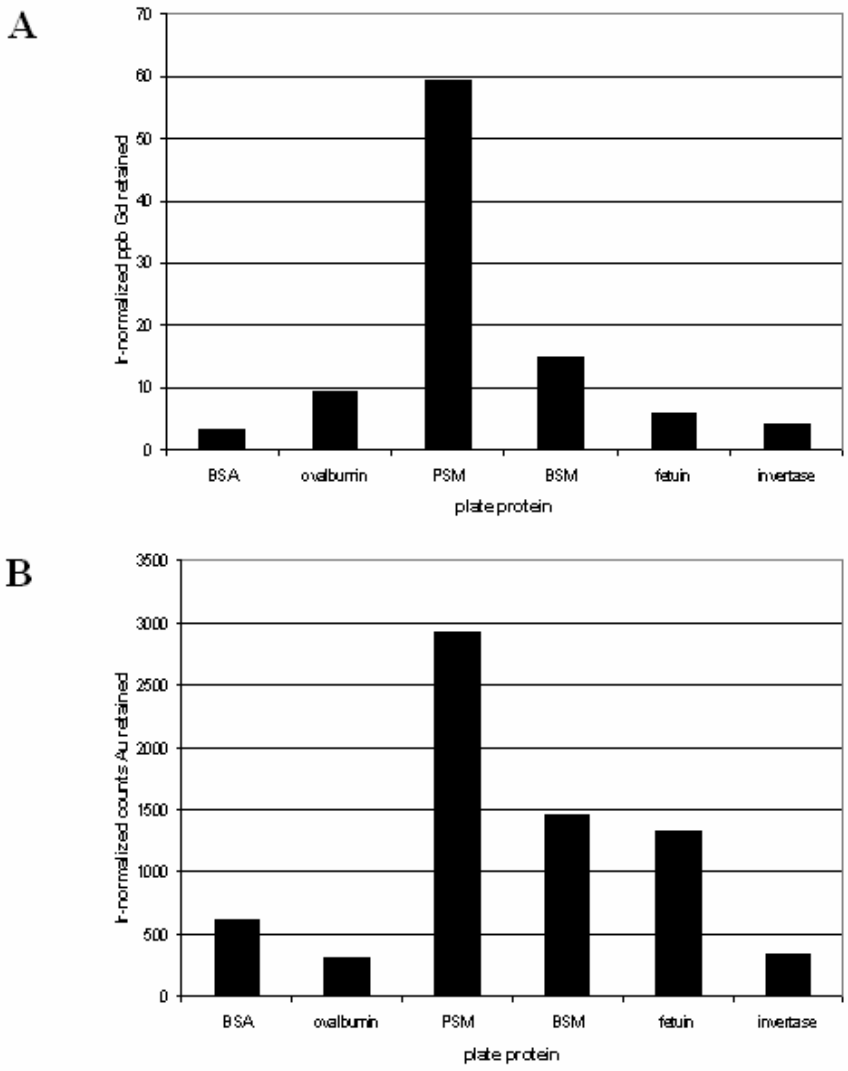

Figure S2. Comparison of WGA-polymer conjugate (6 µg/mL) vs. commercial WGA-Au binding (0.5 µg/mL) profiles to plate glycoproteins. Note: due to lack of an external 1 ppb standard for standardizing the Au signal, the y-axis of the WGA-Au graph is in Ir-normalized Au counts, while the y-axis of the WGA-polymer conjugate is in Ir-normalized Ln ppb.

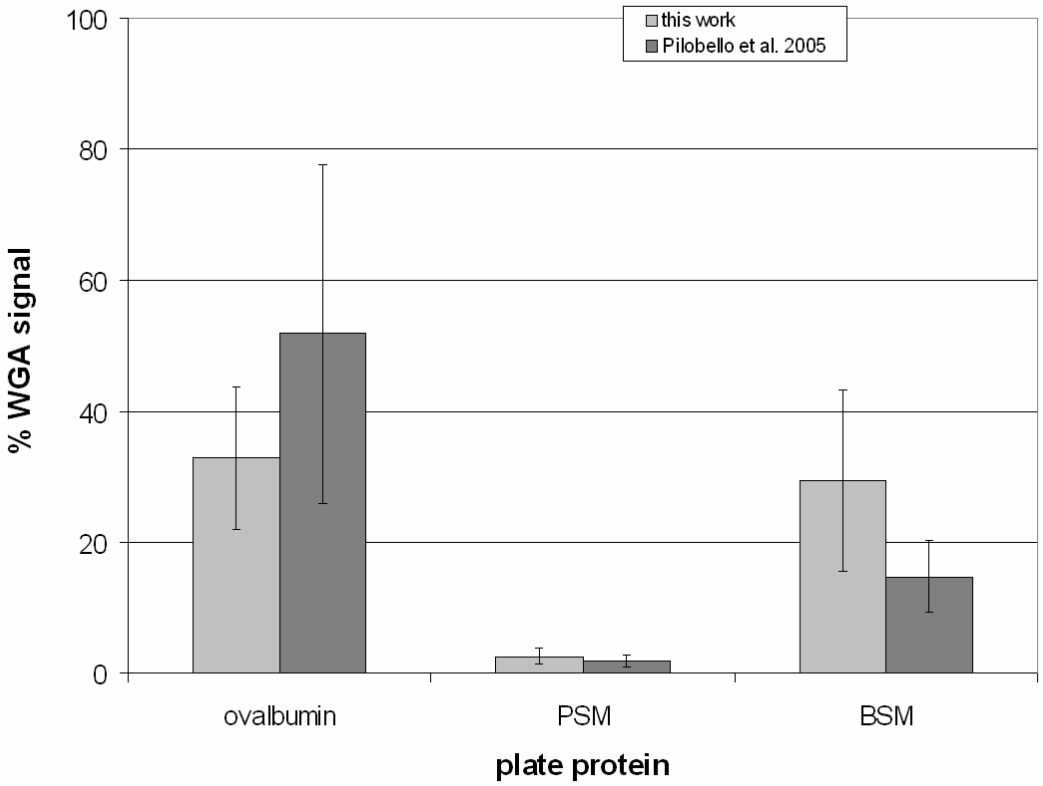

Figure S3. Ratio of ConA/WGA signals, adjusted for Ln^{3+}/multimer and compared to Pilobello *et al.*[18] results.

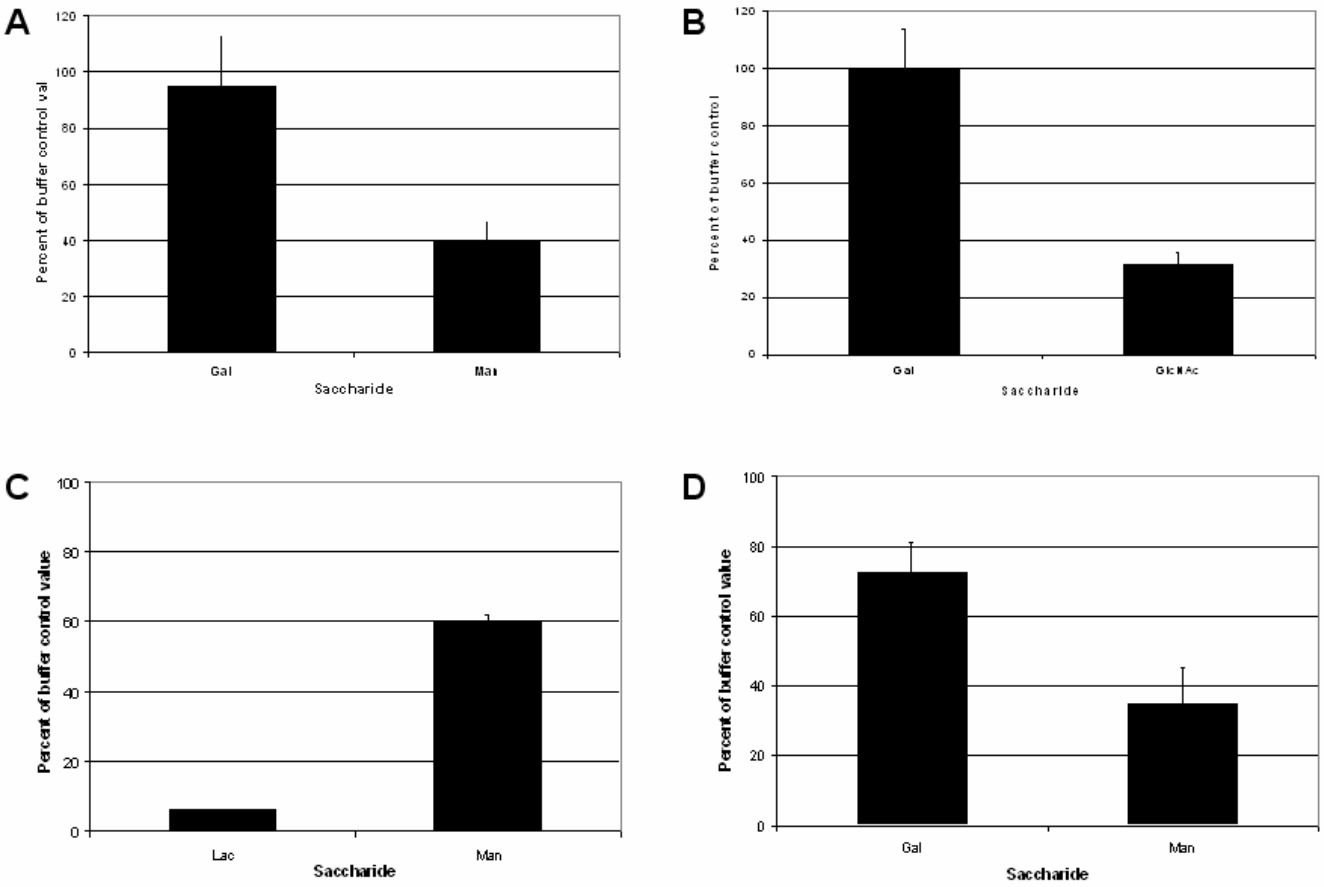

Figure S4. Saccharide inhibition studies. The lectin sugar specificities are listed in Table 1. The values are expressed as a percent of the signal obtained from assays where the lectin-conjugate was diluted with lectin buffer alone (average ± S.D. of at least three replicate experiments). A. ConA diluted with 100 mM Gal or Man, binding to invertase. B. WGA diluted with 500 mM Gal or GlcNAc, binding to PSM. C. PNA diluted with 50 mM Lac or Man, binding to asialofetuin. D. GNA diluted with 100 mM Gal or Man, binding to invertase.

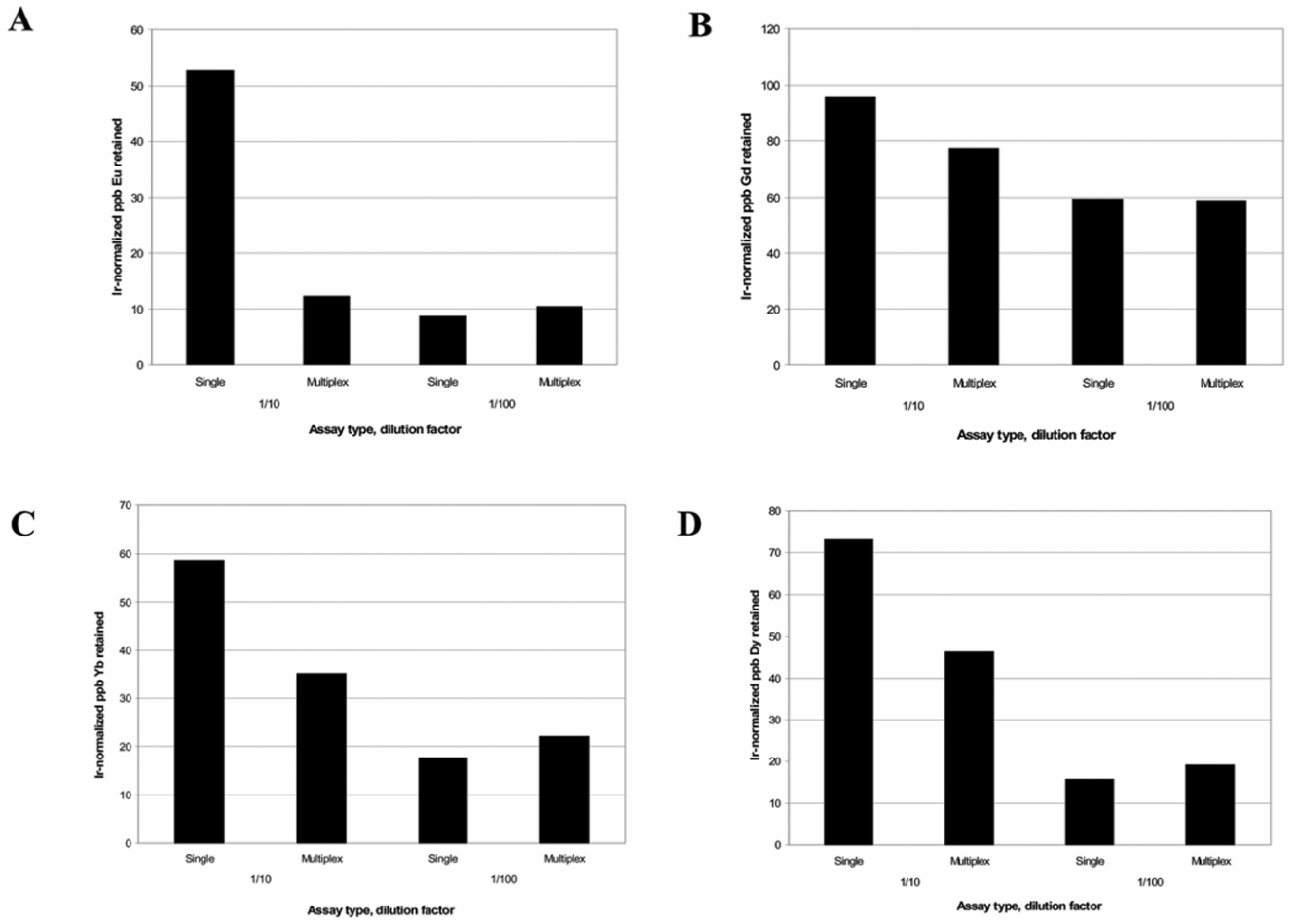

Figure S5. Comparison of representative single and multiplex results for 1:10 vs. 1:100 dilutions of lectin-conjugates. A. ConA with PSM. B. WGA with PSM. C. PNA with asialofetuin. D. GNA with invertase.