Electronic Supplementary Material (ESI) for Chemical Science.

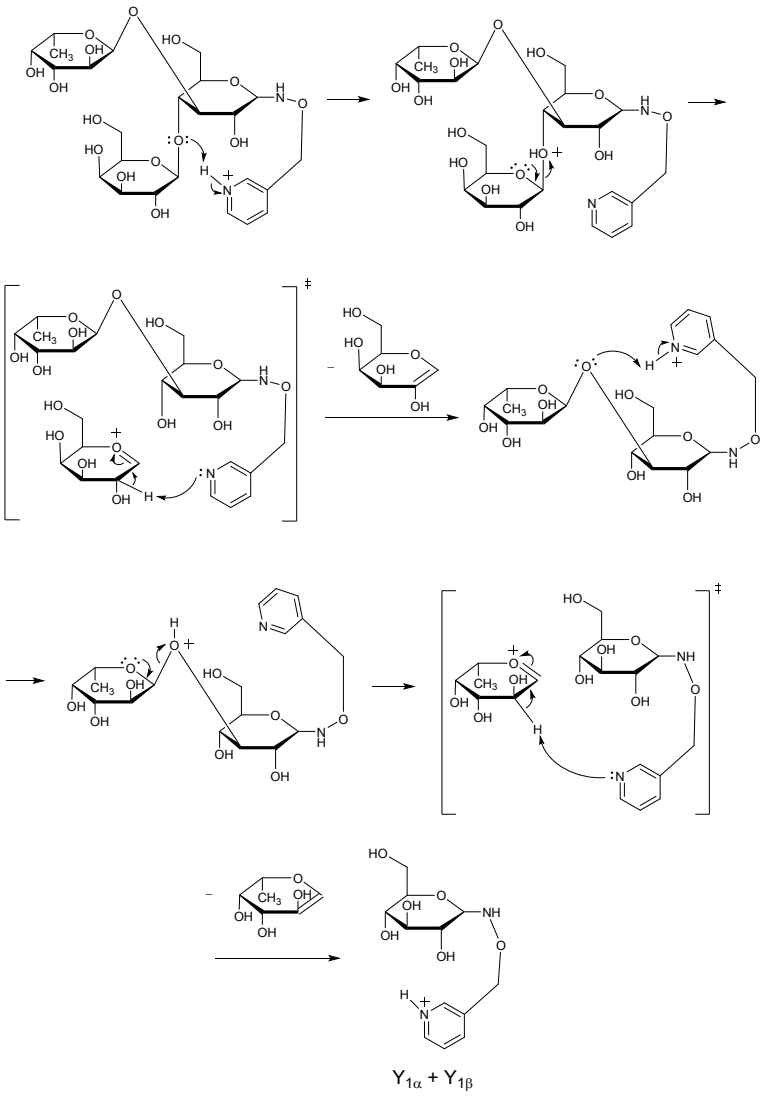
Eradicate Mass Spectrometric Glycan Rearrangement by Utilizing Free Radical

Nikunj Desai,[a] Daniel A. Thomas,[b] Jungeun Lee,[a] Jinshan Gao,*[a] J. L. Beauchamp*[b]

[a] Department of Chemistry and Biochemistry, and Center for Quantitative Obesity Research, Montclair State University, Montclair, NJ 07043

[b] Arthur Amos Noyes Laboratory of Chemical Physics, California Institute of Technology, Pasadena, CA 91125

*To whom correspondence should be addressed: E-mail: gaoj@montclair.edu, jlbchamp@caltech.edu.



Scheme S1. Proposed mechanism for the formation of $Y_{1\alpha}$+$Y_{1\beta}$ ion.

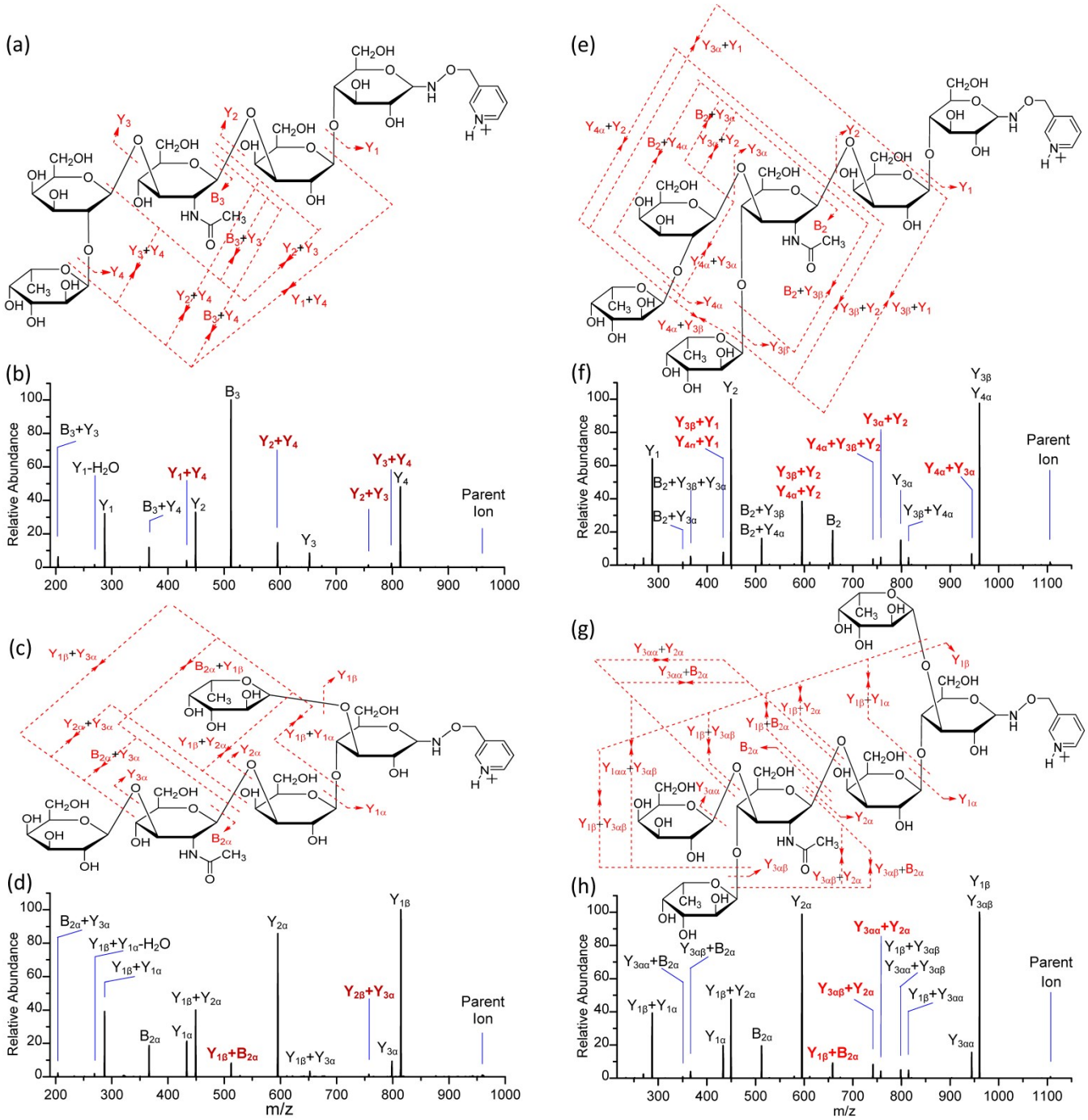


Figure S1. The fragmentation patterns observed following CID of singly-protonated PRAGS-derivatized LNFP I (a), LNFP V (c), LNDFH I (e), and LNDFH II (g), and the CID spectra of singly-protonated PRAGS-derivatized LNFP I (a), LNFP V (c), LNDFH I (e), and LNDFH II (g),. Parent ion refers to the protonated molecular ion.

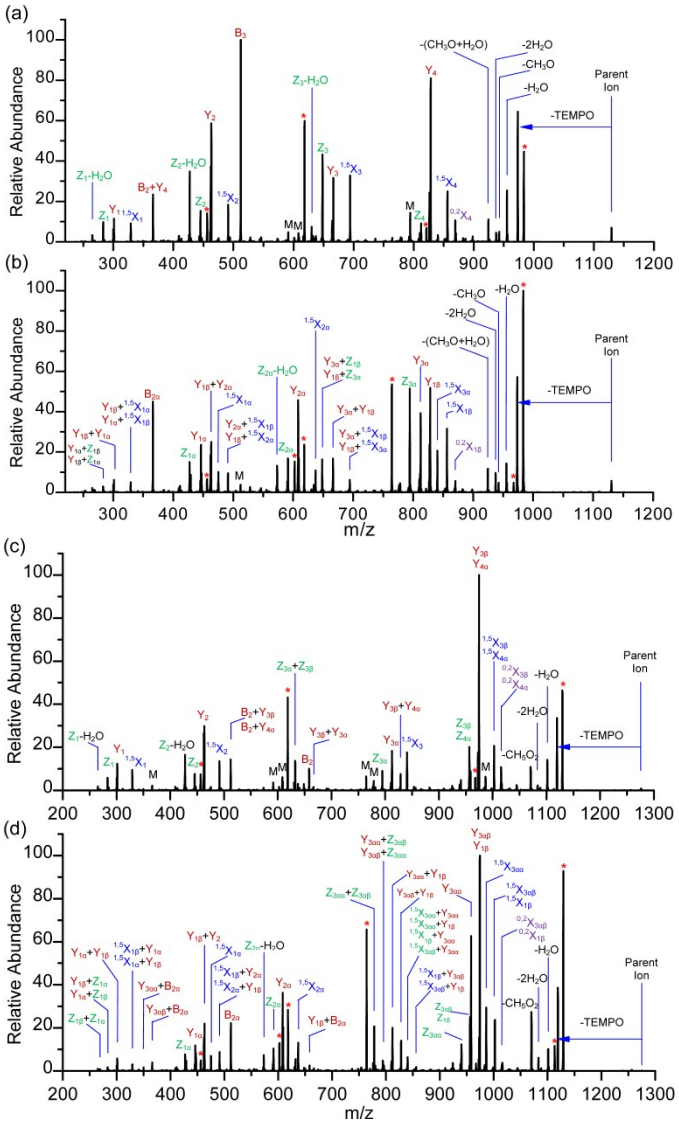


Figure S2. The CID spectra of singly-protonated FRAGS-derivatized LNDFH I (a), LNDFH II (b), LNFP I (c), and LNFP V (d). Parent ion refers to the protonated molecular ion.