

Supplemental Information

for

Global Identification and Differential Distribution Analysis of Glycans in Subcellular Fractions of Bladder Cells

Ganglong Yang^{1*}, Luyu Huang^{2*}, Jiaxu Zhang¹, Hanjie Yu³, Zheng Li³, Feng Guan¹

¹The Key Laboratory of Carbohydrate Chemistry & Biotechnology, Ministry of Education; School of Biotechnology, Jiangnan University, Wuxi, China

²The Key Laboratory of Biological Pesticide and Chemical Biology, Ministry of Education; College of Life Sciences, Fujian Agriculture and Forestry University, Fuzhou, China

³Laboratory for Functional Glycomics, College of Life Sciences, Northwest University, Xi'an, China

Table of Contents:

Fig. S1: Lectin microarray analysis of glycopattern differences in the four subcellular fractions (Mic, Mito, Nuc, and Cyto) from YTS1 (A) and HCV29 (B) cells. The layout of the lectin microarray were also shown with 37 lectins, two negative controls (BSA), and one positive control (Cy3-BSA) (C).

Fig. S2: MALDI-TOF/TOF-MS analysis of N-glycan precursor ions in MS spectra.

Precursor ions were subjected to MS/MS analysis to obtain cleavages, including glycosidic cleavages and cross-ring cleavages. Structures of cleavage ions and m/z values are shown in tandem mass spectra. Five major N-glycan peaks are indicated: m/z 1647.587, 1905.634, 2012.719, 2174.772, 2539.9037.

Fig. S1: Lectin microarray analysis of glycopattern differences in the four subcellular fractions (Mic, Mito, Nuc, and Cyto) from YTS1 (A), KK47 (B) and HCV29 (C) cells. The layout of the lectin microarray were also shown with 37 lectins, two negative controls (BSA), and one positive control (Cy3-BSA) (D).

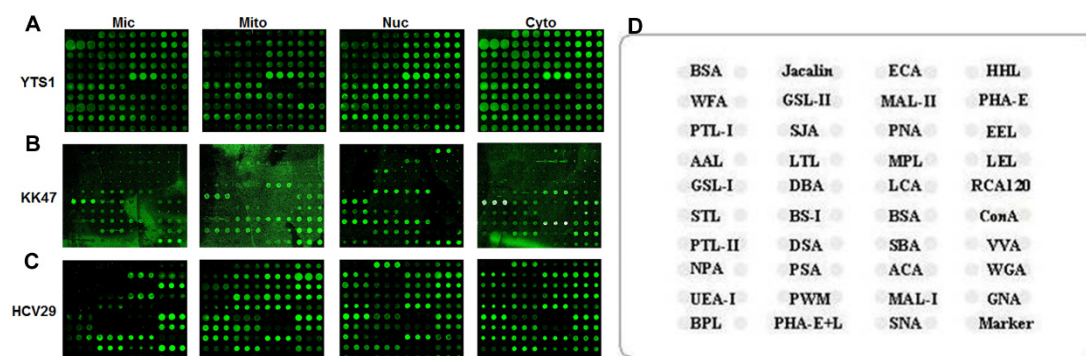
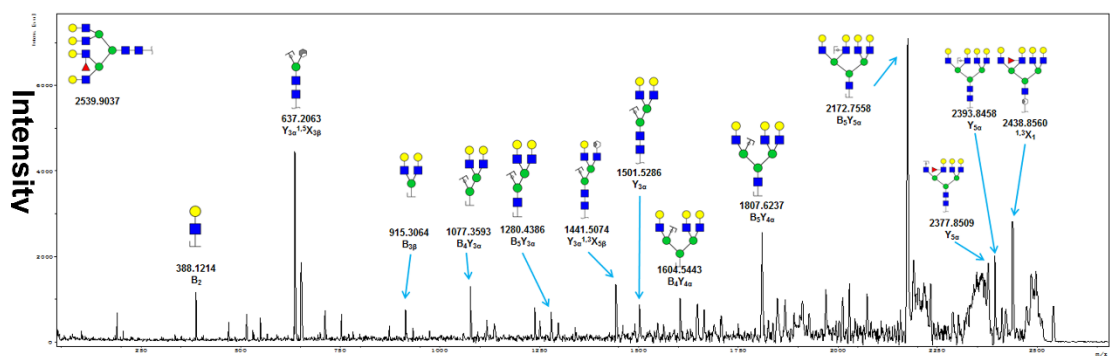
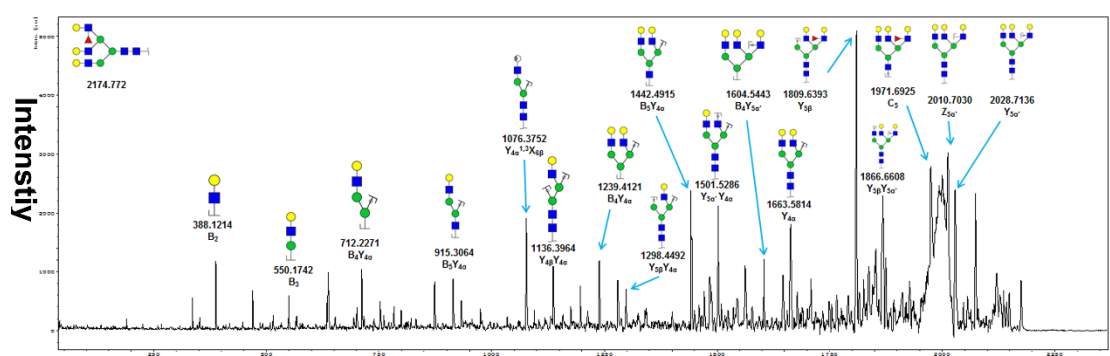
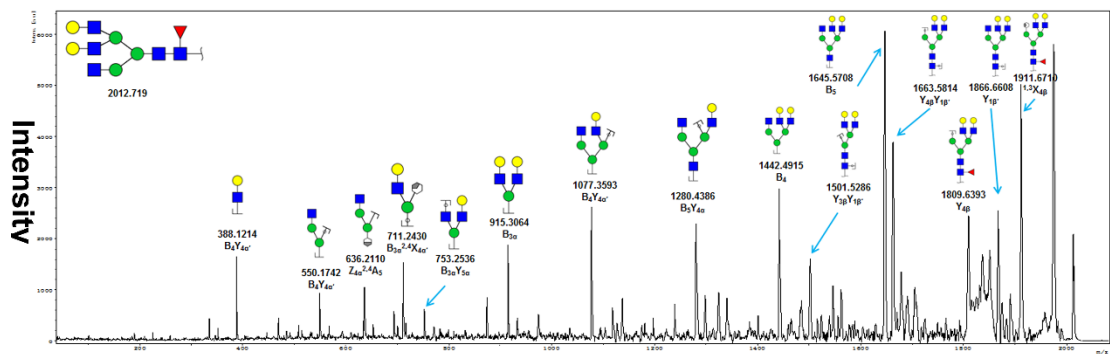
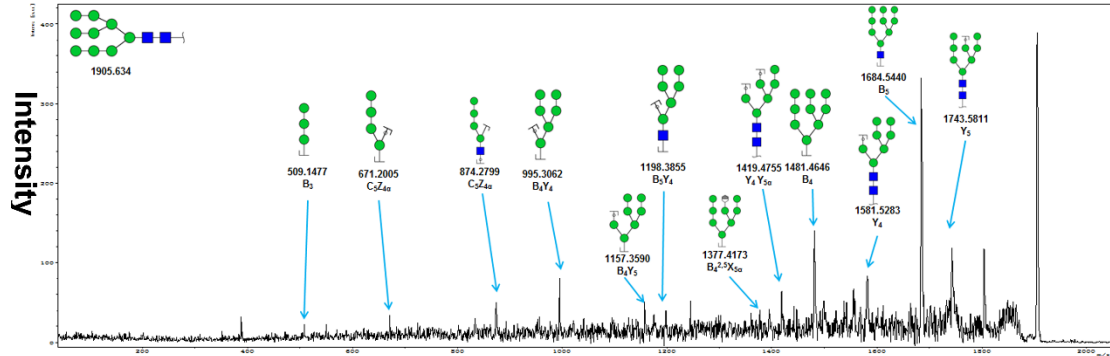
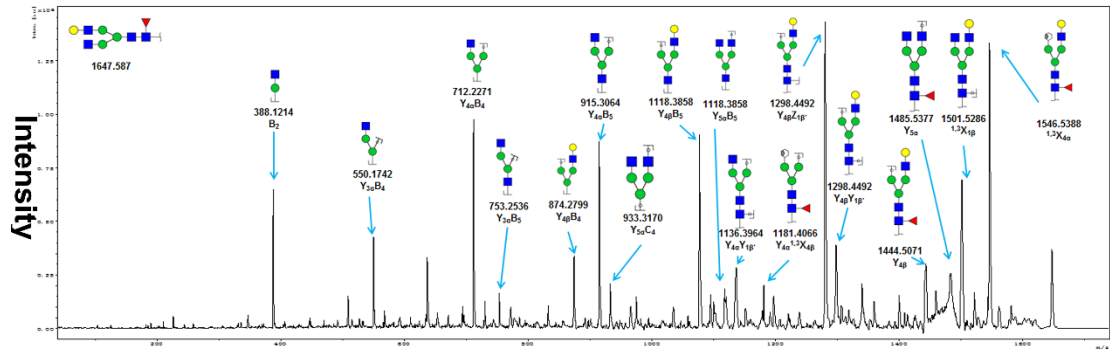


Fig. S2: MALDI-TOF/TOF-MS analysis of N-glycan precursor ions in MS spectra.

Precursor ions were subjected to MS/MS analysis to obtain cleavages, including glycosidic cleavages and cross-ring cleavages. Structures of cleavage ions and m/z values are shown in tandem mass spectra. Five major N-glycan peaks are indicated: m/z 1647.587, 1905.634, 2012.719, 2174.772, 2539.9037.



m/z