

Description of Additional Supplementary Files

File Name: Supplementary Data 1

Description: Summary of identified intact *N*-glycopeptides, glycosites, glycans, and glycoproteins across 24 mouse tissues.

File Name: Supplementary Data 2

Description: Detailed annotation of the 3,045 *N*-glycan structures.

File Name: Supplementary Data 3

Description: Representative MS/MS Spectra for all complete glycans displayed in the main and supplementary figures (a separate PDF file).

File Name: Supplementary Data 4

Description: Expression profiles of 209 glycosyltransferase genes from published RNA-seq data.

File Name: Supplementary Data 5

Description: List of glycoproteins enriched in different subcellular localizations in all different mouse tissues.

File Name: Supplementary Data 6

Description: Tissue distribution of ubiquitously and tissue-specifically detected glycoproteins across 24 mouse tissues.

File Name: Supplementary Data 7

Description: Site-specific *N*-glycan heterogeneities and conservation across mouse tissues.

File Name: Supplementary Data 8

Description: List of the top 20 glycoproteins for each tissue.

File Name: Supplementary Data 9

Description: Tissue-specific glycan compositions (a) or glycan structures (b) identified across 24 mouse tissues.