

**Figure S1.** Schematic diagram outlining the *N*-glycan biosynthesis pathway in ER and Golgi apparatus of plants. The red arrow indicates where we could refine the *N*-glycan biosynthetic model from our data. Dol: dolichol, OST: oligosaccharyltransferase, CNX/CRT cycle: calnexin/calreticulin (CNX/CRT) cycle, MNS: α-mannosidase, GnT: 1,2-*N*-acetylglucosaminyltransferase, FucT: fucosyltransferase, XylT: xylosyltransferase, GM:  $\alpha$ -mannosidase, HEXO:  $\beta$ -N-acetylhexosaminidase, GalT: galactosyltransferase.