



Figure S8. Positions of the detected functional residues are shown with the Z-coordinates of MFS transporters (A) LacY, (B) GlpT, and (C) EmrD. Red squares indicate detected residues within the top 10% of IS. Shaded box on Z-coordinates represents the transmembrane region (-15Å ~ +15 Å from membrane center). Negative and positive values of Z-coordinate indicate the orientation of cytoplasmic and periplasmic sides, respectively. Most of the detected residues are found in the transmembrane region or near to the transmembrane region.