



**Supplementary Figure 1.** Ponceau staining of the membranes that were used for western blots in figure 2

Total protein was extracted from the 3 putative knocked out cell lines 28, 76, 90, the non-transgenic BY2 cells and three control knocked out cell lines. A total of 10  $\mu$ g protein from each sample were loaded on 12% SDS-PAGE followed by western blot using anti-HRP (**A**), anti-codA (**B**) and anti-Cas9 (**C**) antibodies. kDa: molecular weight in kilo Dalton. Arrowhead indicates the presence of the relevant protein. Expected size of codA is ~49 kDa. Expected size of Cas9 is ~159 kDa. (**A**)  $\Delta$ X,  $\Delta$ F,  $\Delta$ XF represent the knocked out cell lines established previously in our lab (Hanania et al. 2017) and used as controls:  $\Delta$ X lacks glycans containing Xylose,  $\Delta$ F lacks glycans containing Fucose,  $\Delta$ XF lacks glycans containing both Xylose & Fucose respectively. BY2 – positive control (the non-transgenic BY2 cells) that reveals Fucose and Xylose glycans. (**B**) BY2 represents negative control (the non-transgenic BY2 cells) and PC represents positive control (cell line expressing codA). (**C**) PC represents positive control (cell line expressing Cas9) and BY2 represents negative control (the non-transgenic BY2 cells).