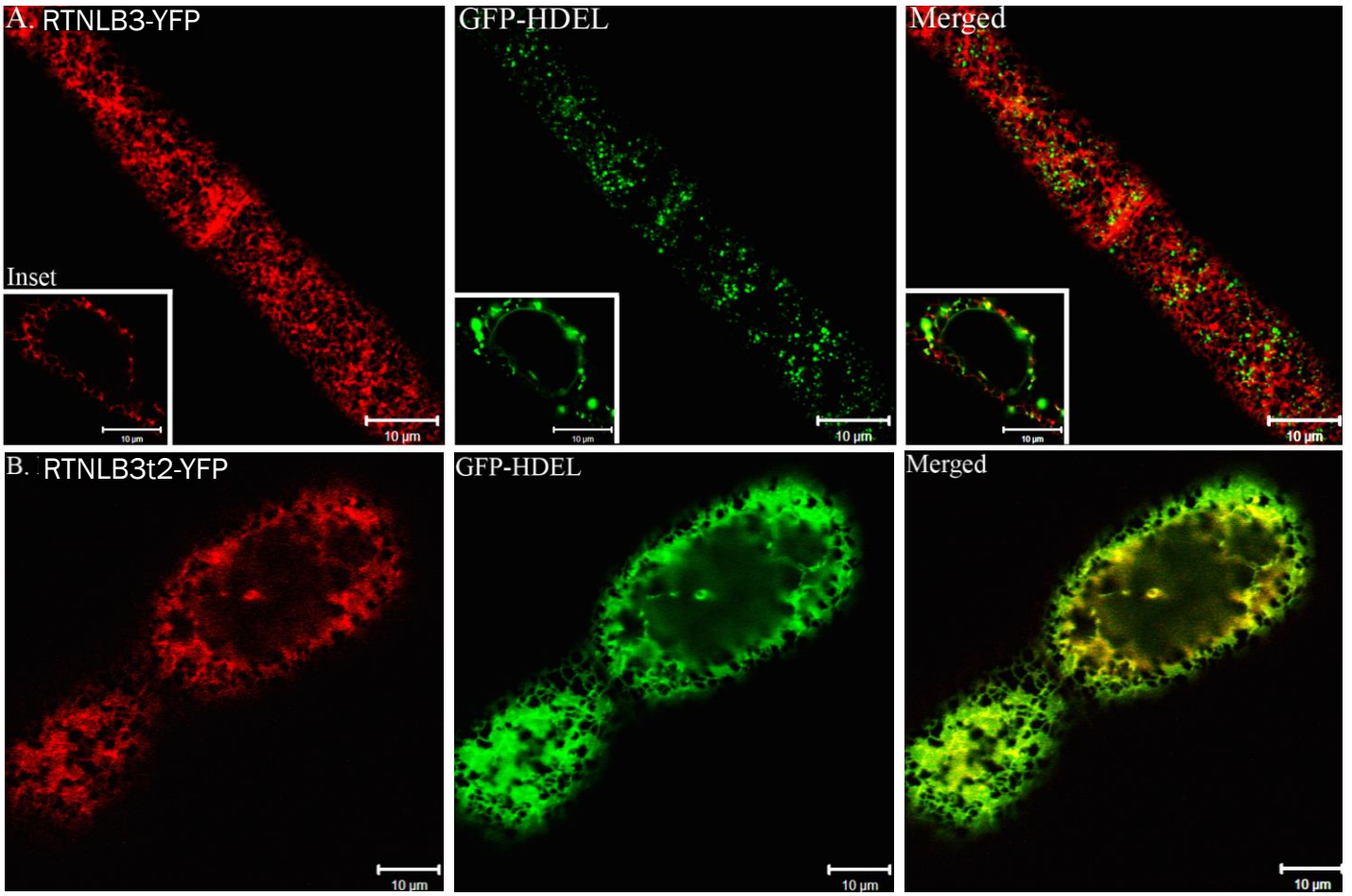
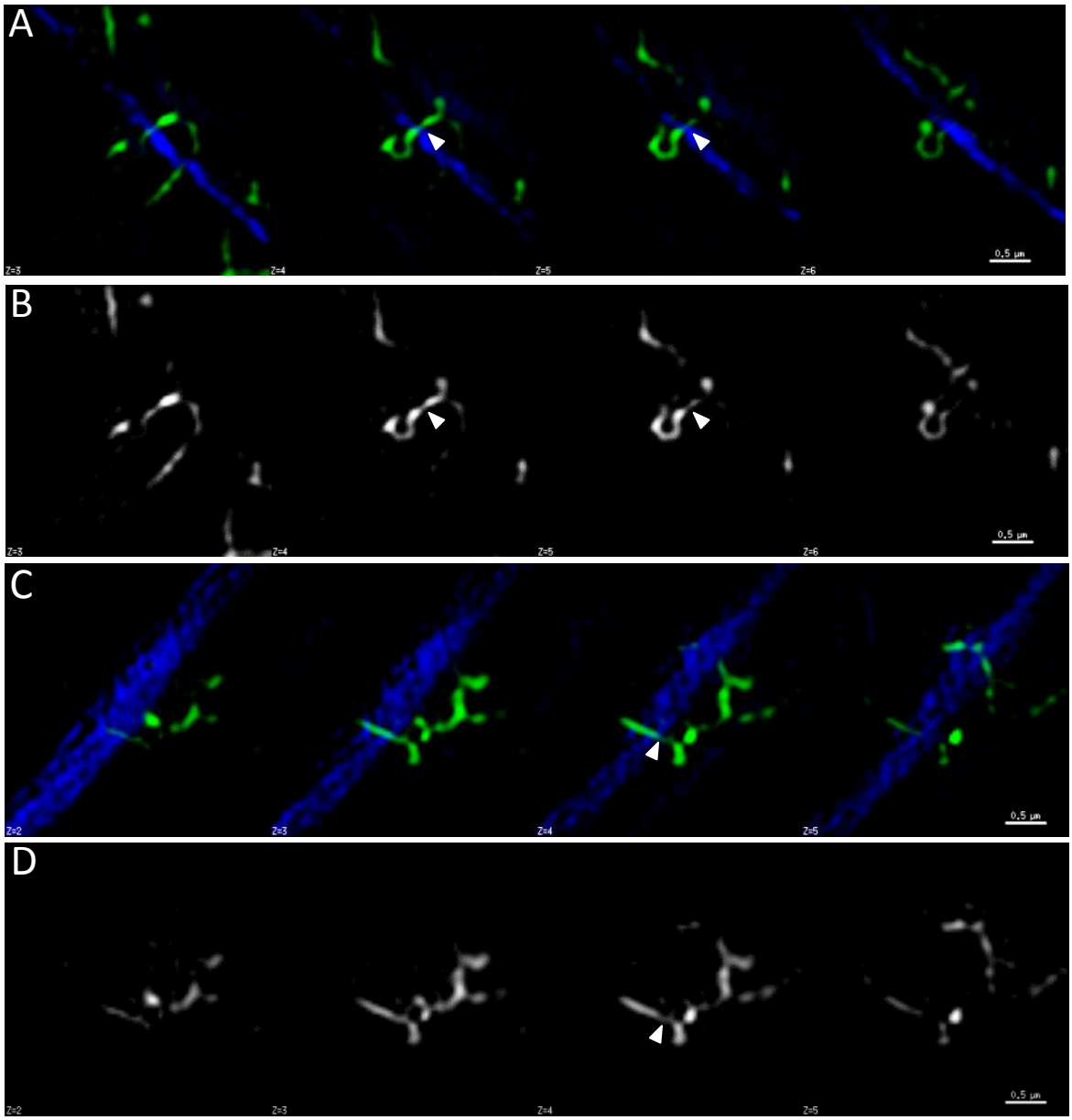
Figure S1



Supplementary Figure 1

RTNLB3-YFP can constrict the ER in interphase BY2 cells, whilst a truncated version cannot. A) GFP-HDEL is squeezed from the ER lumen into discrete lumenal pockets when co-expressed with RTNLB3-YFP. Inset shows the nuclear envelope which has a low degree of curvature and is not labelled by RTNLB3. B) RTN3t2-YFP co-expressed with GFP-HDEL does not constrict the ER in BY2 cells.

Figure S2



Supplementary Figure 2

RTNLB6-GFP labels desmotubules in BY2 cells. Optical sections taken 150 nm apart in the axial dimension, show that a single desmotubule can be tracked as it crosses the cell wall. A and C) Series of sections showing RTNLB6-GFP (green) labelled ER is highly constricted as it passes through the cell wall (blue) B) Single channel of images in A or C, showing RTNLB6-GFP only. Bars = 0.5 µm.

Supplementary Video 1

Movie depicting a 3D reconstruction of ER (labelled with RTNLB6-GFP) associated with PD in BY2 cells. Desmotubules can be seen as highly constricted regions crossing through the cell wall.