



Figure S2 Differential co-localization of both fluorescent proteins, GFP and HISTONE::mCherry, expressed from the P2A vector described in Fig. S1 (with *col-34p*), is confirmed by confocal SP2 microscopy in the B, F and K rectal cells. We noted that the P2A sequence (top panels) appeared to result in slightly more GFP in the nucleus compared to the other 2A peptides instead of being uniformly spread within the whole cell. Confocal imaging shows here that some of the nuclear GFP does not co-localize with mCherry in the nucleus, suggesting that GFP products that have been split from mCherry can be retained in the nucleus. The same observations were made in transgenic lines expressing a SL2 construct (bottom panels), where substantial GFP is found in the nucleus, in a pattern that distinct from HISTONE::mCherry. Middle panels: split-up-inactive P2A* peptide (Hahn and Palmenberg 1996). Both fluorescent proteins are exclusively co-localized in the nucleus, as expected if they form one long polypeptide. The dashed line indicates the position of the rectum; anterior is to the left and ventral to the bottom; (n), nucleus and (c) cytosol; the rectal cells are named on the merge panel.