



Figure 1, figure supplement 4. Characterization of ubiquitin levels and distribution in wildtype and $\Delta ppz1\Delta ppz2$ cells. **(A)** Using quantitative immunoblots mono-ubiquitin : di-ubiquitin ratios were measured in yeast lysates (SEY6210 background) and averaged over multiple experiments ($n = 5$). **(B)** The indicated yeast cells (SUB280 background) containing either empty vector or native *PPZ1* or *PPZ2* complementation vectors were analyzed for total cellular ubiquitin levels by immunoblot analysis. **(D)** Analysis of total ubiquitin in SUB280 yeast lysates from cells grown to mid-log phase in YPD. **(E)** Analysis of mono-ubiquitin : di-ubiquitin ratios were measured in yeast lysates (SUB280 background) and averaged over multiple experiments ($n = 5$).