Description of Additional Supplementary Files

File Name: **Supplementary Movie 1**
Description: **Behavior of nuclear protein in *lem2Δlnp1Δ* cells**
Time-lapse images of *lem2Δlnp1Δ* cells expressing GFP-GST-NLS (green) and Ish1-mCherry and Atb2-mCherrry (magenta) were obtained every 5 min. Optical section images at 1-μm focal interval were obtained at each timepoint and projected using the maximum intensity method. Projected images after denoising and deconvolution are presented. Scale bar represents 10 μm.

File Name: **Supplementary Movie 2**
Description: **Behavior of nuclear protein in WT cells**
Time-lapse images of WT cells expressing GFP-GST-NLS (green) and Ish1-mCherry and Atb2-mCherrry (magenta) were obtained as described in Movie 1. Scale bar represents 10 μm.

File Name: **Supplementary Movie 3**
Description: **Behavior of nuclear protein in *lem2Δ* cells**
Time-lapse images of *lem2Δ* cells expressing GFP-GST-NLS (green) and Ish1-mCherry and Atb2-mCherrry (magenta) were obtained as described in Movie 1. Scale bar represents 10 μm.

File Name: **Supplementary Movie 4**
Description: **Behavior of nuclear protein in *lnp1Δ* cells**
Time-lapse images of *lnp1Δ* cells expressing GFP-GST-NLS (green) and Ish1-mCherry and Atb2-mCherrry (magenta) were obtained as described in Movie 1. Scale bar represents 10 μm.

File Name: **Supplementary Movie 5**
Description: **Behavior of nuclear protein in *lem2Δlnp1Δ* cells overexpressing Apq12**
Time-lapse images of Apq12-overexpressing *lem2Δlnp1Δ* cells expressing GFP-GST-NLS (green) and Ish1-mCherry and Atb2-mCherrry (magenta) were obtained as described in Movie 1. Scale bar represents 10 μm.

File Name: **Supplementary Movie 6**
Description: **Behavior of nuclear protein in *cmp7Δ* cells**
Time-lapse images of *cmp7Δ* cells expressing GFP-GST-NLS (green) and Ish1-mCherry and Atb2-mCherrry (magenta) were obtained as described in Movie 1. Scale bar represents 10 μm.

File Name: **Supplementary Data 1**
Description: *S. pombe* **strains used in this study**