

Description of Additional Supplementary Files

File Name: Supplementary Movie 1

Description: Conformational plasticity of ES27L-B in its exit position. The movie shows a morph between three different cryo-EM reconstructions based on 3D classifications focused on ES27L. The view is as in Fig. 1c top panel rotated 90° counter clockwise.

File Name: Supplementary Movie 2

Description: Conformational plasticity of H59 upon Ebp1-binding. The movie shows a morph between H59 in its locked-position (ribosome without Ebp1, PDB ID 6EK0) and in its docked-position in the Ebp1-ribosome complex. H59 serves as dynamic adaptor with a metazoan-specific bulged-out guanine nucleotide (G2711, red) moving about 10 Å from H53 (locked) to the Ebp1 insert domain (docked). The nucleotides of the H59-closing tetraloop are labelled and shown in colour. View is the same as in Fig. 1c bottom panel.