## **Description of Additional Supplementary Files**

File Name: Supplementary Movie 1

**Description:** Video of a 3D image of a living HeLa cell expressing GFP-HeV M and RFP-FBL (nucleolar marker). Images were acquired using a Leica SP8 microscope with Hyvolution (pinhole at 0.5 Airy units), using 4 x line averages with high sensitivity HyD detectors, and then deconvolved using Huygens (SVI, Netherlands).

File Name: Supplementary Movie 2

**Description:** Video generated using the 3D dSTORM image shown in Fig. 5A.

File Name: Supplementary Data 1

Description: Proteins identified using mass spectrometry.

HeV M wt or HeV K258A M were immunoprecipitated from HEK-293T cells before analysis of interactome by MS as described in materials and methods.