



Supplementary Fig. 1. The effect of HCV IRES domain II on directed hydroxyl radical probing of 18S rRNA with BABE-Fe-elF3i. (a) Detailed regions of 18S rRNA secondary structure indicating the various helices and relevant cleavage sites detailed in the study. (b) Primer extension analysis of 18S rRNA cleaved by BABE-Fe-modified eIF3j. The sequencing lanes are indicated by the letters C, T, A, and G. Other control lanes include 40S subunits in the absence (lane 5) or presence (lane 6) of EDTA/Fe, mock-derivatized eIF3j (-cys+EDTA-Fe) in the absence (lane 7) or presence of wild type (HCV; lane 8), or domain III (HCVAII; lane 9) of the HCV IRES RNA. Other lanes include eIF3j derivatized with BABE-Fe at the positions indicated either in the absence (lanes 10, 13, 16, and 19), or presence of HCV IRES (lanes 11, 14, 17, and 20), or HCV∆II IRES (lanes 12, 15, 18, and 21). 18S rRNA nucleotide positions of cleavage sites are indicated. Colored circles correspond to the components added in each reaction as depicted in the cartoon below. The deletion of domain II (HCVAII) is represented by a dotted line.

Supplementary Fig. 2.



Supplementary Fig. 2. Effects of eIF3, ternary complex or eIF1 and eIF1A on directed hydroxyl radical probing of 18S rRNA with BABE-Fe-elF3j. Primer extension analysis of 18S rRNA cleaved by BABE-Fe-modified eIF3j. The sequencing lanes are indicated by the letters C, T, A, and G. Other lanes include 40S subunits in the absence or presence of EDTA/Fe and mock-derivatized eIF3 (-cys+EDTA-Fe) in the absence or presence of ternary complex (a, b), eIF1, elF1A and elF3 Δi (c), or HCV and elF3 Δi (d). (a) The lanes corresponding to eIF3j derivatized with BABE-Fe at the positions indicated in the absence (lanes 9, 11, 13, and 15), or presence of ternary complex (TC; lanes 10, 12, 14, and 16), are indicated. (b) The lanes corresponding to BABE-Fe-modified eIF3i at the positions indicated in the absence (lanes 9, 11, 13, and 15) or presence of ternary complex (TC; lanes 10, 12, 14, and 16). (c) The lanes corresponding to eIF3j derivatized with BABE-Fe at the positions indicated in the absence (lanes 10, 13, 16 and 19), or presence of eIF1 and eIF1A (eIF1/1A; lanes 11, 14, 17 and 20), or eIF3 Δ j (eIF3 Δ j; lanes 12, 15, 18 and 21). (**d**) The lanes corresponding to eIF3j derivatized with BABE-Fe at the positions indicated in the absence (lanes 10, 13, 16, and 19), or presence of elF3∆j and wild type HCV IRES (HCV; lanes 11, 14,17, and 20), or domains III-IV of the HCV IRES (HCV Δ II; lanes 12, 15, 18, and 21) are indicated. For each gel, cleavage nucleotide positions in the 18S rRNA are indicated and colored circles correspond to the components added in each reaction, as depicted in the cartoons.