

The SBP2 protein central to selenoprotein synthesis contacts the human ribosome at expansion segment 7L of the 28S rRNA

(Supplementary data)

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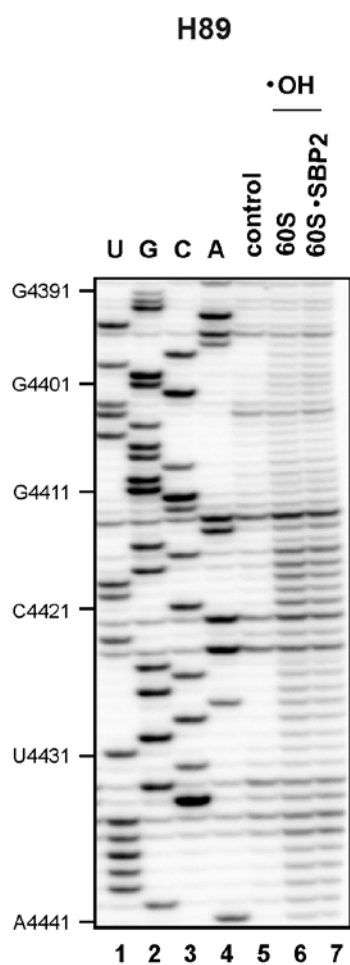
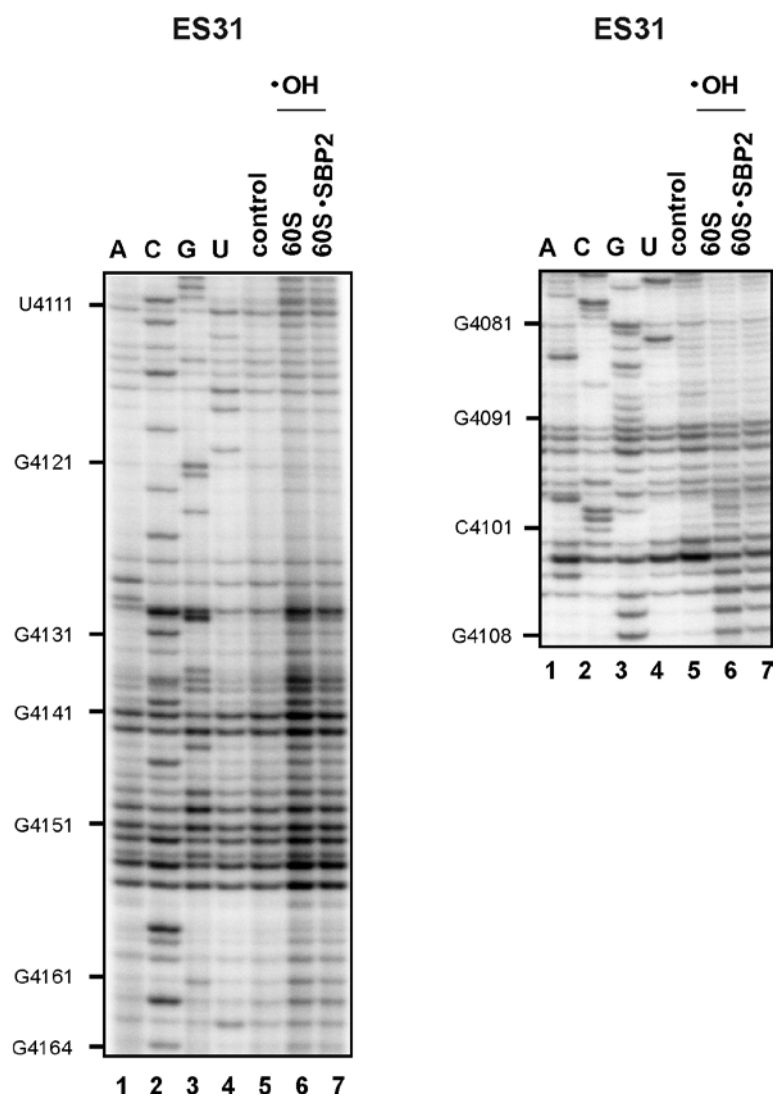
A**B**

Figure S1. Direct hydroxyl radical probing of 28S rRNA in the human 60S•CTSBP2 complex. Reverse transcription analysis of the 28S rRNA at helix H89 (A) and expansion segment ESL31 (B) is displayed. Control lanes: no hydroxyl radicals; lanes 60S: no CTSBP2. U, G, C, A are sequencing lanes.

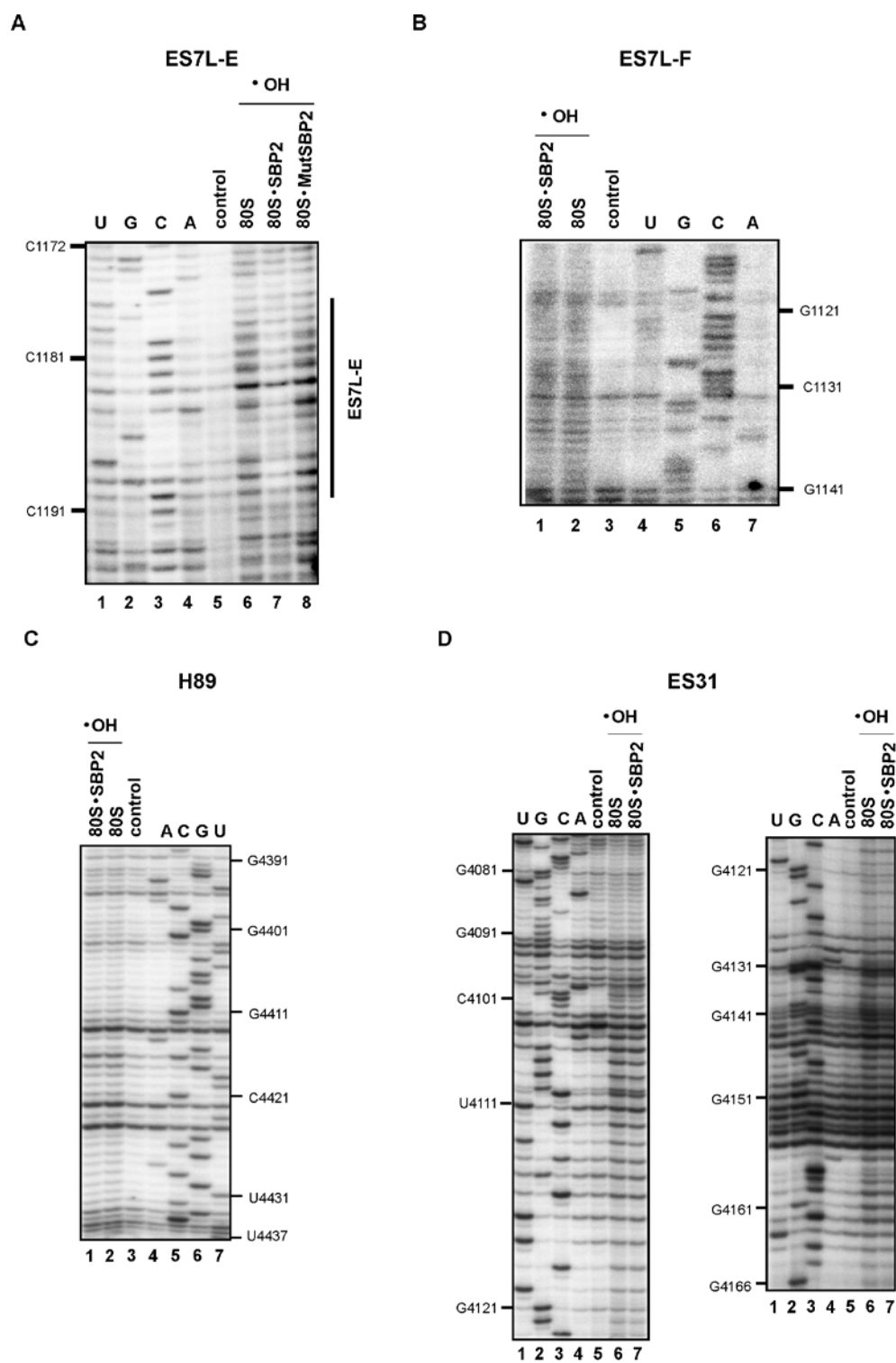


Figure S2. Direct hydroxyl radical probing of 28S rRNA in the human 80S•CTSBP2 complex. Reverse transcription analysis of the 28S rRNA at ES7L-E (A), ES7L-F (B), H89 (C) and at expansion segment ESL31 (D) is displayed. The extent of protection by CTSBP2 is shown on the right by a vertical bar. Control lanes: no hydroxyl radicals; lanes 80S: no CTSBP2. U, G, C, A are sequencing lanes.

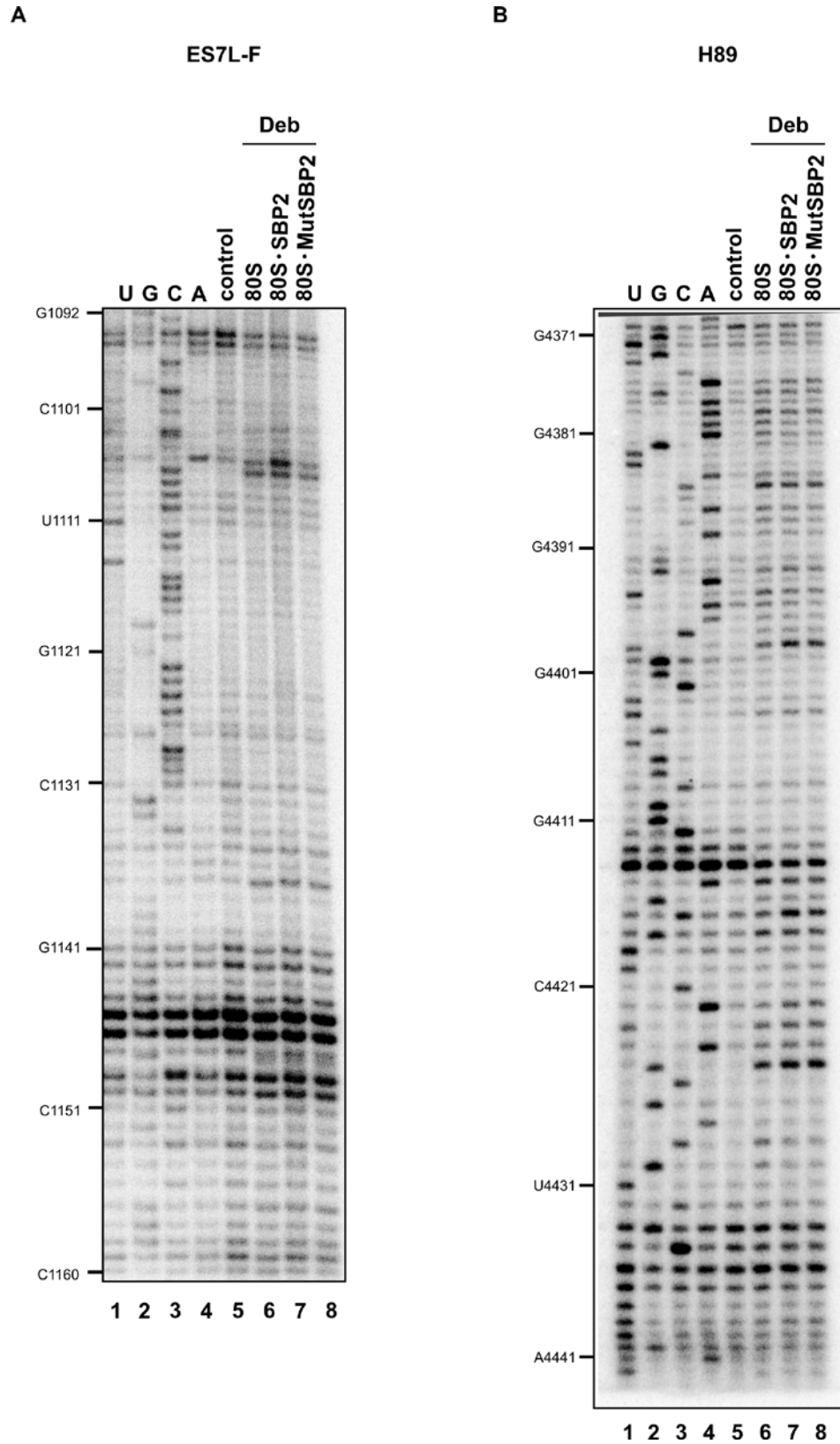


Figure S3. Diepoxybutane cross-linking of CTSP2 to 28S rRNA in the 80S•CTSP2 complex. Reverse transcription analysis of the 28S rRNA at the ES7L-F region (A) and at H89 (B) is displayed. Control lanes: no diepoxybutane; lanes 80S: no CTSP2 or MutSBP2. U, G, C, A are sequencing lanes.

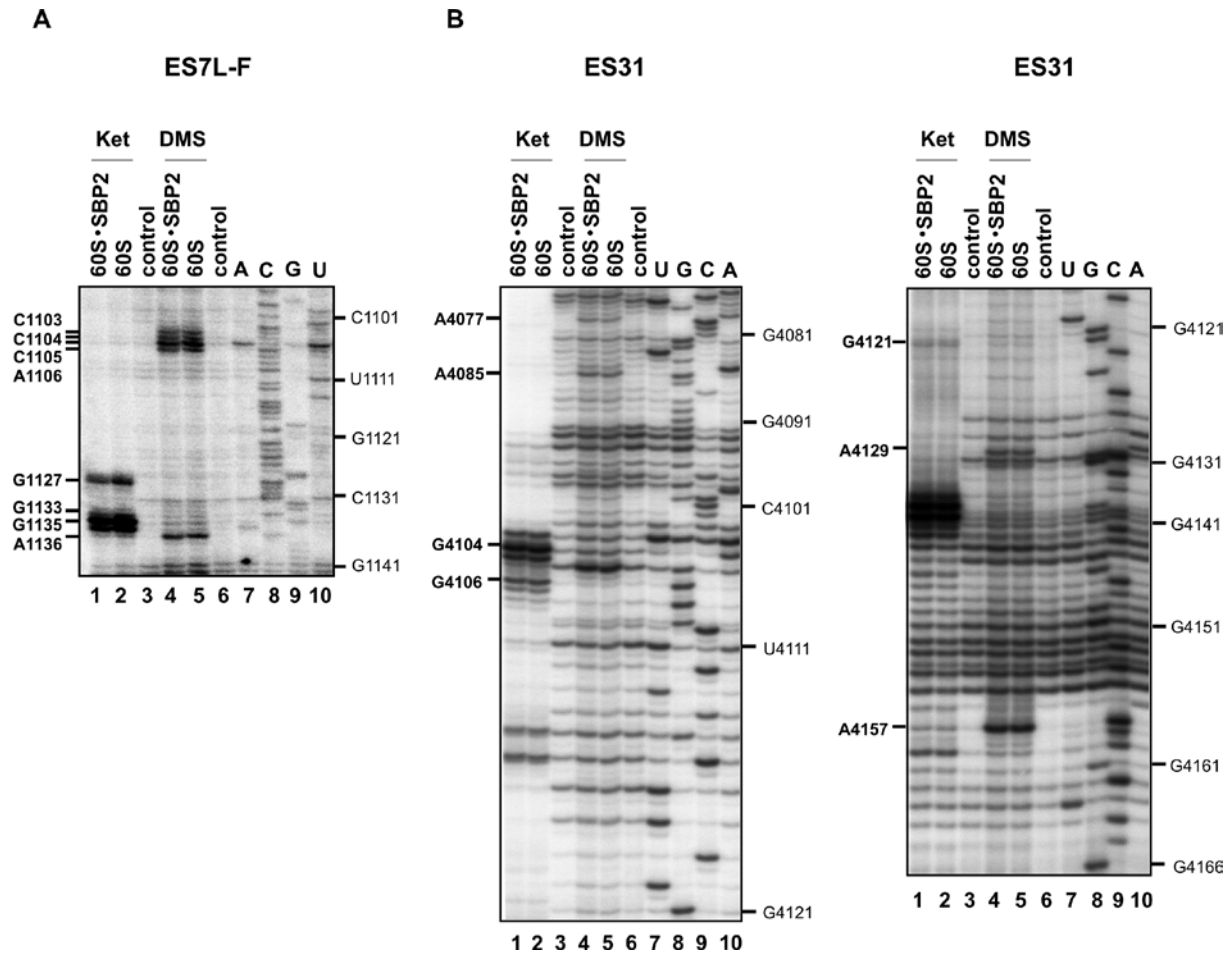


Figure S4. Chemical probing of the 28S rRNA in the 60S•CTSBP2 complex. Reverse transcription analysis of the 28S rRNA at expansion segments ES7L-F (A) and ESL31 (B) is displayed. Reactions contained kethoxal (Ket, lanes 1 and 2) or DMS (lanes 4 and 5). Modified nucleotides are marked on the left. Reverse transcriptase stops one nucleotide prior to the modification site. Control lanes 3 and 6 did not contain DMS or kethoxal, respectively. No CTSBP2 was added in lanes 2 and 5. U, G, C, A are sequencing lanes.