## **Supporting Information**

## Siebrasse et al. 10.1073/pnas.1201781109



**Movie S1** Export event of hrp36-labeled mRNP. Single frame acquisition time 20 ms, data acquisition rate 50 Hz, display at 10 Hz, field of view  $19.2 \times 19.2 \mu m^2$ . The mRNP position is indicated by an arrow. Left, contrast enhanced hrp36 raw data; center, raw data with the mRNP marked in blue; right, rolling ball background-subtracted and filtered data (red) with the NTF2 signal shown in green.

Movie S1 (AVI)

S A N C

<



**Movie S2** Cytosolic probing of Dbp5. Single frame acquisition time 20 ms, data acquisition rate 50 Hz, display at 5 Hz, field of view  $19.2 \times 19.2 \mu m^2$ . The Dbp5 position is indicated by an arrow. Left, contrast enhanced Dbp5 raw data; center, raw data with the Dbp5 marked in blue; right, rolling ball background-subtracted and filtered data (red) with the NTF2 signal shown in green.

Movie S2 (AVI)