Supplementary Materials

Crystal Structure of a Luteoviral RNA Pseudoknot and Model for a Minimal Ribosomal Frameshifting Motif

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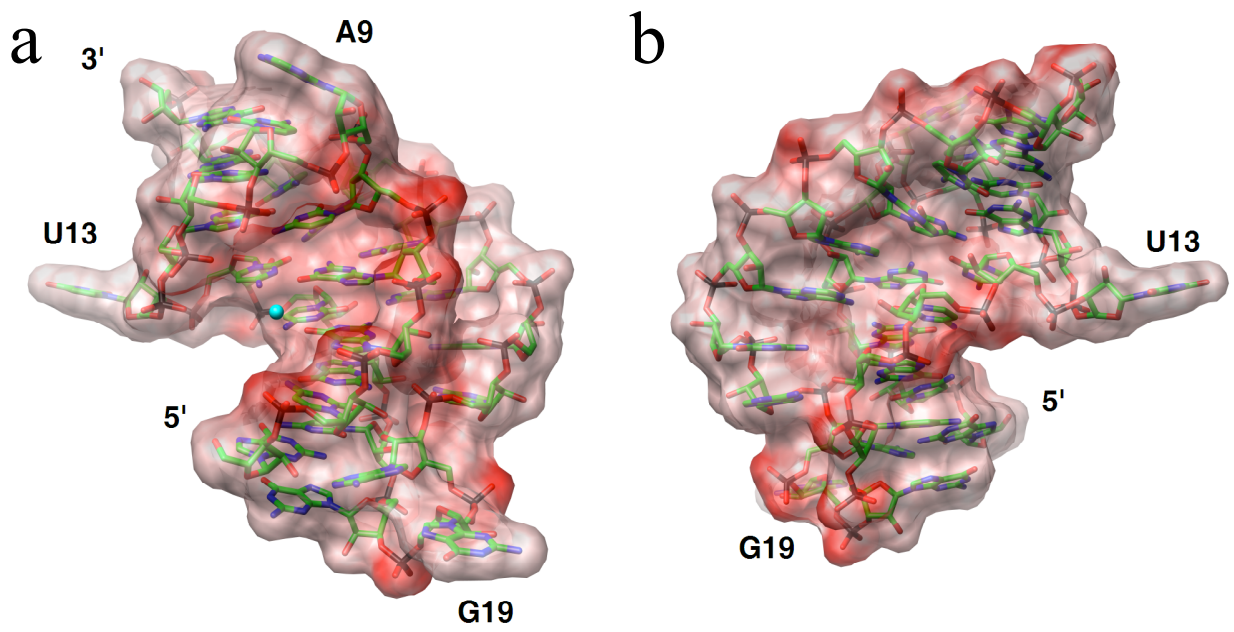

Suppl. Figure 1.

Electrostatic surface potential of the BWYV pseudoknot RNA. *a*, the BWYV pseudoknot viewed into the major grooves of stem 1 and stem 2 with loop 2 on the right. *b*, rotated by 180° around the vertical relative to panel *a*, and viewed into the continuous minor groove formed by stems 1 and 2. The potentials were calculated with the program GRASP and are displayed in the energy range between -38 to +38 k_BT/e. Single negative charges were used for all nucleotides with the exception of C8 that was assumed to be neutral. Red regions are negatively polarized and a Mg^{2+} ion coordinated near the interface between stem 1 and stem 2 is depicted as a small cyan sphere.