## **Description of Additional Supplementary Files**

File name: Supplementary Movie 1

**Description:** Movie depicting the internal dodecahedral cage of dsRNA filaments in RV-

B14. Each dsRNA duplex contains 14 bp (blue slabs for bases).

**File name:** Supplementary Movie 2

**Description:** Movie depicting the five classes obtained after a focused classification on the dsRNA region at the capsid interior at the two-fold axes. Class I (grey) accounted for 8% of the total two-fold regions analyzed; class II (yellow) for another 4%; class III (cyan) for 29%; class IV (magenta) for 24%; and class V (purple) for 35%.

File name: Supplementary Movie 3

**Description:** Movie depicting selected interactions between the dsRNA duplex and the capsid proteins VP1 and VP2.

**File name:** Supplementary Movie 4

**Description:** Movie depicting the transition between full and empty RV-B14 capsids, highlighting the conformational change of Trp38 (green) and Lys 52 (blue) of VP2.