

## **Description of Additional Supplementary Files**

**Supplementary Data 1:** 3D coordinates of polymer structures of DDX58 locus.

**Supplementary Movie 1:** Polymer structure representing TADs in Mock condition, obtained from MD simulations of Mock model. For visualization purposes, only the three central TADs are shown.

**Supplementary Movie 2:** Polymer structure representing TADs in SARS-CoV-2 infected condition, obtained from MD simulations of SARSCoV-2 model. For visualization purposes, only the three central TADs are shown.

**Supplementary Movie 3:** Time dynamics of 3D structure in DDX58 locus, Mock condition, obtained from MD simulations. Below, genomic coordinates and color scheme are reported.

**Supplementary Movie 4:** Time dynamics of 3D structure in DDX58 locus, SARS-CoV-2 infected condition, obtained from MD simulations. Below, genomic coordinates and color scheme are reported.

**Supplementary Software 1 :** Scripts and commands to run Molecular Dynamics simulations of A/B compartments, TADs and DDX58 locus.