

Description of Additional Supplementary Files

File Name: Supplementary Movie 1

Description: ("lc_comp_final.mp4", resolution: 2700x3000): Individual composition of the IncA87-246 trajectory, shown from same two angles as above.

File Name: Supplementary Movie 2

Description: ("sc_comp_final.mp4", resolution: 2700x3000): individual composition of the IncA87-237 trajectory, shown from same two angles as above.

File Name: Supplementary Movie 3

Description: ("all3_comp_final.mp4", resolution: 2650x882): Composition showing side-by-side comparison of all three IncA simulations performed: 87-246 (green), 87-237 (blue), G144A (orange). Each trajectory is represented via two viewing angles.

File Name: Supplementary Movie 4

Description: ("g1_comp_final.mp4", resolution: 2700x3000): individual composition of the IncA87-246(G144A) trajectory, shown from same two angles as above.