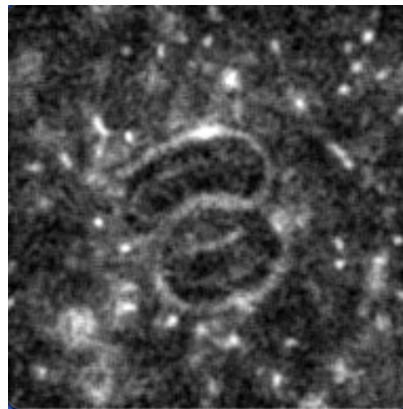


## Supplementary Material

### 1 *FD*-VIRUS AS IDEAL DEPLETANT FOR RBCS AGGREGATION

**Supplementary Movie S1** shows the fluorescently labeled *fd* particles moving along or bouncing off the surface of the RBCs. No *fd* was observed penetrating the RBC's membrane. For visualization purposes the ratio of labeled to non-labeled rods is 1:700, and the total rods concentration is 4mg/ml. Initially, the fluorescence LED and halogen lamp were used to visualize the rods and the none stained RBCs, respectively. The intensity of the halogen lamp is gradually lowered to zero, so that only the rods are visible.



**Figure S1.** Two red blood cells dispersed in fluorescently labeled *fd*.

### 2 THE CHAIN DYNAMIC STATE

**Supplementary Movie S2** shows the chain dynamic state where two RBCs flow together side by side but do not fully separate in the time of observation.



**Figure S2.** The chain dynamic state.