

## Supplementary Figure 3. Flow cytometric analysis to determine the frequency of hybrid formation.

a) A positive control was used to set the region of interest for fluorescence activated cell sorting (FACS). The positive control was generated by transfecting hMSCs with both BiFC constructs (YCH3.1, VNH3.1) such that a fraction of the cells would receive both constructs and thus exhibit fluorescence even without fusion. b) The co-culture sample wherein hMSCs received H, F (viral fusion proteins) and one BiFC construct (YCH3.1) while the HL1cm received hSLAM (viral fusion protein receptor) and the other BiFC construct (VNH3.1) such that fluorescence is detected only with cell fusion. The region of interest, which was intentionally set to include only cells with high levels of BiFC-associated fluorescence, indicates the number of hybrid cells. In this case, the frequency of hybrid formation is 21 cells in 400,000 cells analyzed or approximately 1 in 20,000 cells.