## File name: Supplementary Movie 1

Description: Cryo-EM map of the A3H-VCBCC complex and its superimposition with the corresponding atomic model.

## File name: Supplementary Movie 2

Description: Cryo-EM structure of the A3H-VCBCC complex highlighting the A3H-Vif interface around A3H  $\alpha$ 3 and  $\alpha$ 4.

## File name: Supplementary Movie 3

Description: Surface electrostatic potential of the A3H-VCBCC complex highlighting the A3H-Vif interface.