

## Exploring the associations of host genes for viral infection revealed by genome-wide RNAi and virus-host protein interactions

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### Supporting Information Legends

**Table. S1** Essential host factors (EHFs) of human immunodeficiency virus type 1 (HIV-1) and influenza A virus (IAV) identified by genome-wide RNA interference (RNAi) screens.

**Table. S2** List of genes with core enrichment in essential host factors (EHFs) and virus targeting proteins (VTPs) gene sets for human immunodeficiency virus type 1(HIV-1) and influenza A virus (IAV).

**Table. S3** The results of Gene Ontology Bioprocesses(GO BPs) enrichment analysis for core genes of essential host factors (EHFs) or virus targeting proteins (VTPs) for human immunodeficiency virus type 1(HIV-1) and influenza A virus (IAV) respectively.

**Table. S4** Topology parameters of essential host factors (EHFs) and virus targeting proteins (VTPs) of human immunodeficiency virus type 1(HIV-1) and influenza A virus (IAV) in human protein-protein interaction (PPI) network.

**Table. S5** Statistics of essential host factors (EHF)/virus targeting proteins (VTP) enriched modules in human protein-protein interaction (PPI) network.

**Table. S6** List and statistics of the essential host factors (EHFs) or virus targeting proteins (VTPs) with one-step distance to the nearest VTPs or EHFs for human immunodeficiency virus type 1(HIV-1) and influenza A virus (IAV).

**Table. S7** The numbers of essential host factors (EHFs) or virus targeting proteins (VTPs) for human immunodeficiency virus type 1(HIV-1) and influenza A virus (IAV) mapped onto Kyoto Encyclopedia of Genes and Genomes (KEGG) pathways.

**Table. S8** The location of essential host factors (EHFs) or virus targeting proteins (VTPs) in the same Kyoto Encyclopedia of Genes and Genomes (KEGG) signaling pathways for human immunodeficiency virus type 1(HIV-1) and influenza A virus (IAV) respectively.

**Table. S9** Detailed information of essential host factors (EHFs) and virus targeting proteins (VTPs) for human immunodeficiency virus type 1 (HIV-1) and influenza A virus (IAV) in Kyoto Encyclopedia of Genes and Genomes (KEGG) pathway of focal adhesions.

**Table. S10** Statistics on overlap of essential host factors (EHFs) for human immunodeficiency virus type 1 (HIV-1) and influenza A virus (IAV) reported by different laboratories based on published screens.