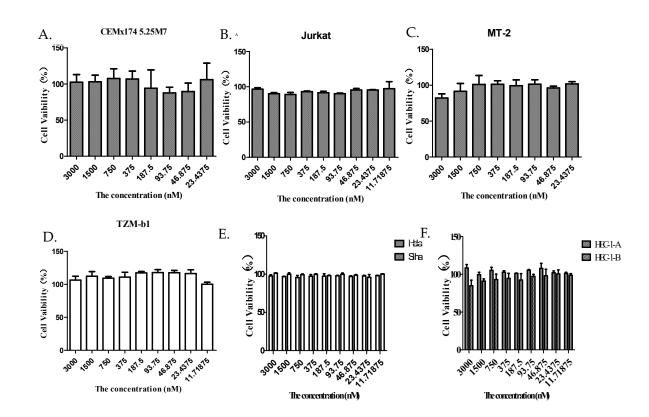
SUPPLEMENTARY INFORMATION

A Novel CXCR4 Targeting Protein SDF-1/54 as an HIV-1 Entry Inhibitor

Suiyi Tan¹+, Wenjuan Li¹+, Zhaofeng Li¹+, Yujing Li³, Jiangyan Luo³, Liang zhentian Yu³, Jie Yang³, Mengjie Qiu¹, Hongyan Cheng¹, Wei Xu², Shibo Jiang², Lu Lu²+ and Shuwen Liu¹+, Weifeng Ma³+

- ^{1.} Guangdong Provincial Key Laboratory of New Drug Screening, School of Pharmaceutical Sciences, Southern Medical University, Guangzhou 510515, China;
- ² Key Laboratory of Medical Molecular Virology of Ministries of Education & Health, Shanghai Medical College and Institute of Medical Microbiology, Fudan University, Shanghai 200032, PR China;
- ³ Department of Microbiology, School of Public Health, Southern Medical University, Guangzhou, 510515, China
- [†] These authors contributed equally to this study.
- * Correspondence:Tel:+862062789123, +862061648538, +862154237671; E-mail: maweifeng919@163.com; liusw@smu.edu.cn, lul@fudan.edu.cn



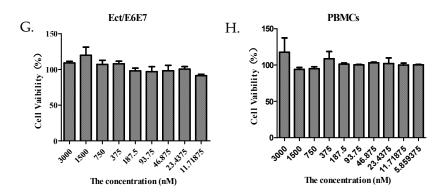


Figure S1:*In vitro* **cytotoxicity of SDF-1/54.**A. CEMx174 5.25M7 cells, B. Jurka cells, C. MT-2 cells, D. TZM-b1 cells, E. Hela cells and Siha cells, F. HEC-1-A cells and HEC-1-B cells, G. Ect/E6E7 cells, H. PBMC cells. The concentrations of SDF-1/54 double dilution from 3000 to 11.7 nM. The MTT assay was used to determine the cytotoxicity.

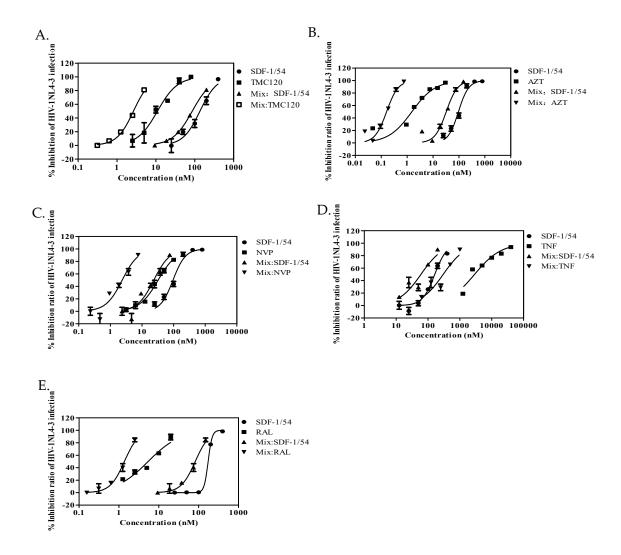


Figure S2: Synergism achieved by combining SDF-1/54 and ARV drugs for inhibition of infection by HIV-1NL4-3. Compounds were examined at fixed molar rations individually and in combination. A. SDF-1/54 and TMC120 (30:1); B. SDF-1/54 and AZT (200:1); C. SDF-1/54 and NVP (10:1), D.SDF-1/54 and TNF (1:5), E. SDF-1/54 and RAL (60:1).

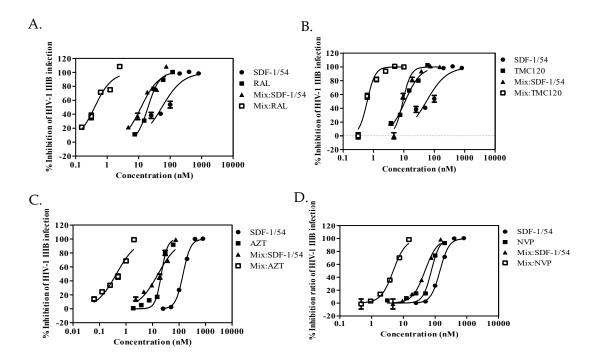


Figure S3: Synergism achieved by combining SDF-1/54 and ARV drugs for inhibition of infection by HIV-1III. Compounds were examined at fixed molar rations individually and in combination. A. SDF-1/54 and RAL (30:1); B. SDF-1/54 and TMC120 (15:1); C. SDF-1/54 and AZT (37.5:1) D.SDF-1/54 and NVP (10:1).

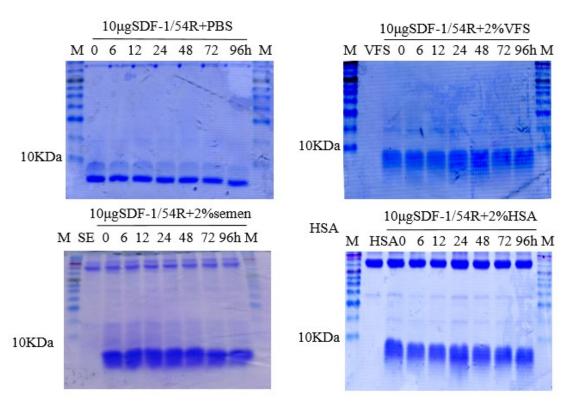


Figure S4: The effects of PBS, human VSF, SE-F, and has on the stability of SDF-1/54. SDF-1/54 was incubated with PBS, VSF, SE-F and HSA respectively for various time periods. The level of SDF-1/54 in the mixture was determined by SDS PAGE.