SUPPLEMENTAL REFERENCES


Baalwa, J., Wang, S., Parrish, N.F., Decker, J.M., Keele, B.F., Learn, G.H., Yue, L., Ruzagira, E., Ssemwanga, D., Kamali, A., et al. (2013). Molecular identification, cloning and characterization of transmitted/founder HIV-1 subtype A, D and A/D infectious molecular clones. Virology *436*, 33–48.

Bibollet-Ruche, F., Heigele, A., Keele, B.F., Easlick, J.L., Decker, J.M., Takehisa, J., Learn, G., Sharp, P.M., Hahn, B.H., and Kirchhoff, F. (2012). Efficient SIVcpz replication in human lymphoid tissue requires viral matrix protein adaptation. J. Clin. Invest. *122*, 1644–1652.

Bodelle, P., Vallari, A., Coffey, R., McArthur, C.P., Beyeme, M., Devare, S.G., Schochetman, G., and Brennan, C.A. (2004). Identification and Genomic Sequence of an HIV Type 1 Group N Isolate from Cameroon. AIDS Res. Hum. Retroviruses *20*, 902–908.

Bosque, A., and Planelles, V. (2009). Induction of HIV-1 latency and reactivation in primary memory CD4+ T cells. Blood *113*, 58–65.

Carette, J.E., Raaben, M., Wong, A.C., Herbert, A.S., Obernosterer, G., Mulherkar, N., Kuehne, A.I., Kranzusch, P.J., Griffin, A.M., Ruthel, G., et al. (2011). Ebola virus entry requires the cholesterol transporter Niemann–Pick C1. Nature *477*, 340–343.

Das, A.T., Harwig, A., and Berkhout, B. (2011). The HIV-1 Tat Protein Has a Versatile Role in Activating Viral Transcription ▽. J. Virol. *85*, 9506–9516.

DuBridge, R.B., Tang, P., Hsia, H.C., Leong, P.M., Miller, J.H., and Calos, M.P. (1987). Analysis of mutation in human cells by using an Epstein-Barr virus shuttle system. Mol. Cell. Biol. *7*, 379–387.

Fenton-May, A.E., Dibben, O., Emmerich, T., Ding, H., Pfafferott, K., Aasa-Chapman, M.M., Pellegrino, P., Williams, I., Cohen, M.S., Gao, F., et al. (2013). Relative resistance of HIV-1 founder viruses to control by interferon-alpha. Retrovirology *10*, 146.

Fouchier, R.A., Meyer, B.E., Simon, J.H., Fischer, U., and Malim, M.H. (1997). HIV-1 infection of non-dividing cells: evidence that the amino-terminal basic region of the viral matrix protein is important for Gag processing but not for post-entry nuclear import. EMBO J. *16*, 4531–4539.

Freel, S.A., Picking, R.A., Ferrari, G., Ding, H., Ochsenbauer, C., Kappes, J.C., Kirchherr, J.L., Soderberg, K.A., Weinhold, K.J., Cunningham, C.K., et al. (2012). Initial HIV-1 Antigen-Specific CD8+ T Cells in Acute HIV-1 Infection Inhibit Transmitted/Founder Virus Replication. J. Virol. *86*, 6835–6846.

Gao, F., Scearce, R.M., Alam, S.M., Hora, B., Xia, S., Hohm, J.E., Parks, R.J., Ogburn, D.F., Tomaras, G.D., Park, E., et al. (2009). Cross-reactive monoclonal antibodies to multiple HIV-1 subtype and SIVcpz envelope glycoproteins. Virology *394*, 91–98.

Gnanadurai, C.W., Pandrea, I., Parrish, N.F., Kraus, M.H., Learn, G.H., Salazar, M.G., Sauermann, U., Töpfer, K., Gautam, R., Münch, J., et al. (2010). Genetic Identity and Biological Phenotype of a Transmitted/Founder Virus Representative of Nonpathogenic Simian Immunodeficiency Virus Infection in African Green Monkeys. J. Virol. *84*, 12245–12254.

Hotter, D., Kirchhoff, F., and Sauter, D. (2013). HIV-1 Vpu does not degrade interferon regulatory factor 3. J. Virol. *87*, 7160–7165.

Jin, T., Perry, A., Jiang, J., Smith, P., Curry, J.A., Unterholzner, L., Jiang, Z., Horvath, G., Rathinam, V., Johnstone, R.W., et al. (2012). Structures of The HIN Domain:DNA Complexes Reveal Ligand Binding and Activation Mechanisms of The AIM2 Inflammasome and IFI16 Receptor. Immunity *36*, 561–571.

Jønsson, K.L., Laustsen, A., Krapp, C., Skipper, K.A., Thavachelvam, K., Hotter, D., Egedal, J.H., Kjolby, M., Mohammadi, P., Prabakaran, T., et al. (2017). IFI16 is required for DNA sensing in human macrophages by promoting production and function of cGAMP. Nat. Commun. *8*, 14391.

Jordan, A., Bisgrove, D., and Verdin, E. (2003). HIV reproducibly establishes a latent infection after acute infection of T cells in vitro. EMBO J, 22(8), 1868-1877.

Keele, B.F., Van Heuverswyn, F., Li, Y., Bailes, E., Takehisa, J., Santiago, M.L., Bibollet-Ruche, F., Chen, Y., Wain, L.V., Liegeois, F., et al. (2006). Chimpanzee Reservoirs of Pandemic and Nonpandemic HIV-1. Science *313*, 523–526.

Konvalinka, J., Litterst, M.A., Welker, R., Kottler, H., Rippmann, F., Heuser, A.M., and Kräusslich, H.G. (1995). An active-site mutation in the human immunodeficiency virus type 1 proteinase (PR) causes reduced PR activity and loss of PR-mediated cytotoxicity without apparent effect on virus maturation and infectivity. J. Virol. *69*, 7180–7186.

Kumar, P., Hui, H.X., Kappes, J.C., Haggarty, B.S., Hoxie, J.A., Arya, S.K., Shaw, G.M., and Hahn, B.H. (1990). Molecular characterization of an attenuated human immunodeficiency virus type 2 isolate. J. Virol. *64*, 890–901.

Mack, K., Starz, K., Sauter, D., Langer, S., Bibollet-Ruche, F., Learn, G.H., Stürzel, C.M., Leoz, M., Plantier, J.-C., Geyer, M., et al. (2017). Efficient Vpu-Mediated Tetherin Antagonism by an HIV-1 Group O Strain. J. Virol. *91*, e02177-16.

Martins, L.J., Bonczkowski, P., Spivak, A.M., De Spiegelaere, W., Novis, C.L., DePaula-Silva, A.B., Malatinkova, E., Trypsteen, W., Bosque, A., Vanderkerckhove, L., and Planelles, V. (2016). Modeling HIV-1 Latency in Primary T Cells Using a Replication-Competent Virus. AIDS Res Hum Retroviruses. *32*, 187-193.

Mason, R.D., Welles, H.C., Adams, C., Chakrabarti, B.K., Gorman, J., Zhou, T., Nguyen, R., O'Dell, S., Lusvarghi, S., Bewley, C.A., et al. (2016). Targeted Isolation of Antibodies Directed against Major Sites of SIV Env Vulnerability. PLoS Pathog. *12*.

Morrone, S.R., Wang, T., Constantoulakis, L.M., Hooy, R.M., Delannoy, M.J., and Sohn, J. (2014). Cooperative assembly of IFI16 filaments on dsDNA provides insights into host defense strategy. Proc. Natl. Acad. Sci. U. S. A. *111*, E62-71.

Morton, E.L., Forst, C.F., Zheng, Y., DePaula-Silva, A.B., Ramirez, G.P., Planelles, V., and D'Orso, I. (2019). Transcriptional Circuit Fragility Influences HIV Proviral Fate. Cell Reports (in press).

Ochsenbauer, C., Edmonds, T.G., Ding, H., Keele, B.F., Decker, J., Salazar, M.G., Salazar-Gonzalez, J.F., Shattock, R., Haynes, B.F., Shaw, G.M., et al. (2012). Generation of transmitted/founder HIV-1 infectious molecular clones and characterization of their replication capacity in CD4 T lymphocytes and monocyte-derived macrophages. J. Virol. *86*, 2715–2728.

Ostertag, E.M., Prak, E.T., DeBerardinis, R.J., Moran, J.V., and Kazazian, H.H., Jr. (2000). Determination of L1 retrotransposition kinetics in cultured cells. Nucleic Acids Res., *28*, 1418-1423.

Parrish, N.F., Gao, F., Li, H., Giorgi, E.E., Barbian, H.J., Parrish, E.H., Zajic, L., Iyer, S.S., Decker, J.M., Kumar, A., et al. (2013). Phenotypic properties of transmitted founder HIV-1. Proc. Natl. Acad. Sci. U. S. A. *110*, 6626–6633.

Plantier, J.-C., Leoz, M., Dickerson, J.E., Oliveira, F.D., Cordonnier, F., Lemée, V., Damond, F., Robertson, D.L., and Simon, F. (2009). A new human immunodeficiency virus derived from gorillas. Nat. Med. *15*, 871–872.

Platt, E.J., Wehrly, K., Kuhmann, S.E., Chesebro, B., and Kabat, D. (1998). Effects of CCR5 and CD4 Cell Surface Concentrations on Infections by Macrophagetropic Isolates of Human Immunodeficiency Virus Type 1. J. Virol. *72*, 2855–2864.

Salazar-Gonzalez, J.F., Salazar, M.G., Keele, B.F., Learn, G.H., Giorgi, E.E., Li, H., Decker, J.M., Wang, S., Baalwa, J., Kraus, M.H., et al. (2009). Genetic identity, biological phenotype, and evolutionary pathways of transmitted/founder viruses in acute and early HIV-1 infection. J. Exp. Med. *206*, 1273–1289.

Stewart, S.A., Dykxhoorn, D.M., Palliser, D., Mizuno, H., Yu, E.Y., An, D.S., Sabatini, D.M., Chen, I.S., Hahn, W.C., Sharp, P.A., et al. (2003). Lentivirus-delivered stable gene silencing by RNAi in primary cells. RNA *9*, 493-501.

Talbott, R., Kraus, G., Looney, D., and Wong-Staal, F. (1993). Mapping the determinants of human immunodeficiency virus 2 for infectivity, replication efficiency, and cytopathicity. Proc. Natl. Acad. Sci. U. S. A. *90*, 4226–4230.

Tebit, D.M., Zekeng, L., Kaptué, L., Gürtler, L., Fackler, O.T., Keppler, O.T., Herchenröder, O., and Kräusslich, H.-G. (2004). Construction and characterization of an HIV-1 group O infectious molecular clone and analysis of vpr- and nef-negative derivatives. Virology *326*, 329–339.

Turrini, F., Marelli, S., Kajaste-Rudnitski, A., Lusic, M., Van Lint, C., Das, A.T., Harwig, A., Berkhout, B., and Vicenzi, E. (2015). HIV-1 transcriptional silencing caused by TRIM22 inhibition of Sp1 binding to the viral promoter. Retrovirology *12*, 104.

Uzé, G., Di Marco, S., Mouchel-Vielh, E., Monneron, D., Bandu, M.T., Horisberger, M.A., Dorques, A., Lutfalla, G., and Mogensen, K.E. (1994). Domains of interaction between alpha interferon and its receptor components. J. Mol. Biol. *243*, 245–257.

Verrier, J.D., Madorsky, I., Coggin, W.E., Geesey, M., Hochman, M., Walling, E., Daroszewski, D., Eccles, K.S., Ludlow, R., and Semple-Rowland, S.L. (2011). Bicistronic lentiviruses containing a viral 2A cleavage sequence reliably co-express two proteins and restore vision to an animal model of LCA1. PLoS One *6*, e20553

Yu, F., Zingler, N., Schumann, G., and Strätling, W.H. (2001). Methyl-CpG-binding protein 2 represses LINE-1 expression and retrotransposition but not Alu transcription. Nucleic Acids Res *29*, 4493-4501.

Yukl, S.A., Kaiser, P., Kim, P., Telwatte, S., Joshi, S.K., Vu, M., Lampiris, H., and Wong, J.K. (2018). HIV latency in isolated patient CD4+ T cells may be due to blocks in HIV transcriptional elongation, completion, and splicing. Sci. Transl. Med. *10*.

Zimmerman, E.S., Sherman, M.P., Blackett, J.L., Neidleman, J.A., Kreis, C., Mundt, P., Williams, S.A., Warmerdam, M., Kahn, J., Hecht, F.M., et al. (2006). Human Immunodeficiency Virus Type 1 Vpr Induces DNA Replication Stress In Vitro and In Vivo. J. Virol. *80*, 10407–10418.