Electronic Supplementary Material

Role of Intracellular Distribution of Feline and Bovine SAMHD1 Proteins in Lentiviral Restriction

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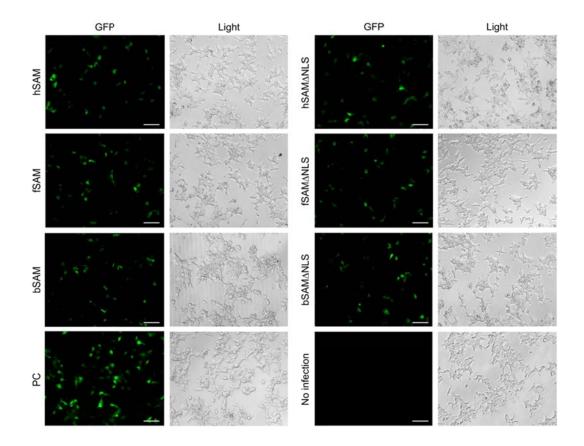


Fig S1. The GFP expression in FIV-GFP-infected HEK293T cells expressing WT or NLS-deleted SAMHD1 proteins. SAMHD1-transfected HEK293T cells (2×10^5) were infected with FIV-GFP (MOI = 0.5). 48 h post infection, the expression of GFP was observed under fluorescence microscope. The light fields of infected cells were also shown. Infection of empty vector-transfected cells was set as the positive control (PC). White scale bars, 50 μ m. One representative result of three independent infections is shown.

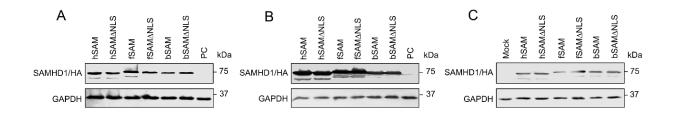


Fig S2. The expression of WT and NLS-deleted SAMHD1 proteins in different cells before infection. **A-C** The intracellular levels of indicated SAMHD1 proteins in the transfected (**A**) TZM-bl cells and (**B**) HEK293T cells and (**C**) the stable U937 cells were analyzed by Western blotting using anti-HA and anti-GAPDH antibodies.

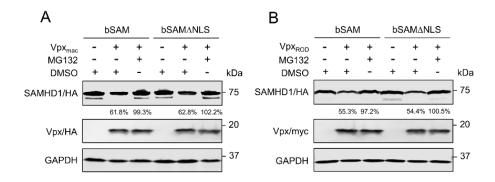


Fig S3. Both WT and NLS-deleted bovine SAMHD1 were degraded by Vpx in a proteasome-dependent manner. **A, B** HEK293 cells (1×10^6) were co-transfected with 600 ng of WT or NLS-deleted bovine SAMHD1-HA expression plasmids and 500 ng of (**A**) pCG-Vpxmac-HA or (**B**) pCG-VpxROD-myc or empty vector. The transfected cells were treated with MG132 at 20 μ mol/L or DMSO as a negative control at 36 h after transfection. Cells were harvested 12 h later (48 h post-transfection) and then analyzed by Western blotting using anti-HA, anti-myc and anti-GAPDH antibodies. The percentage of SAMHD1 in the presence of Vpxmac or VpxROD was calculated relative to that of the corresponding SAMHD1 in the absence of Vpxmac or VpxROD (set to 100%, respectively).