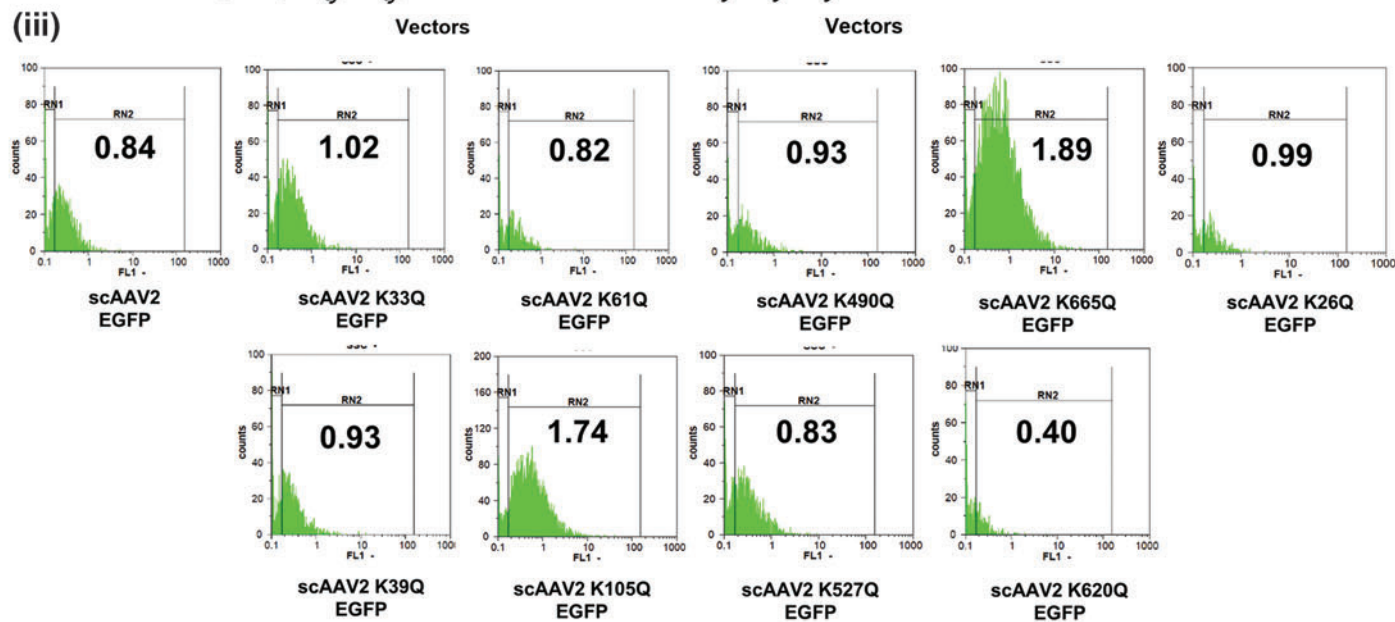
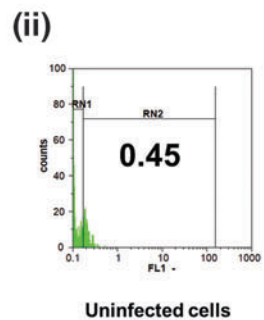
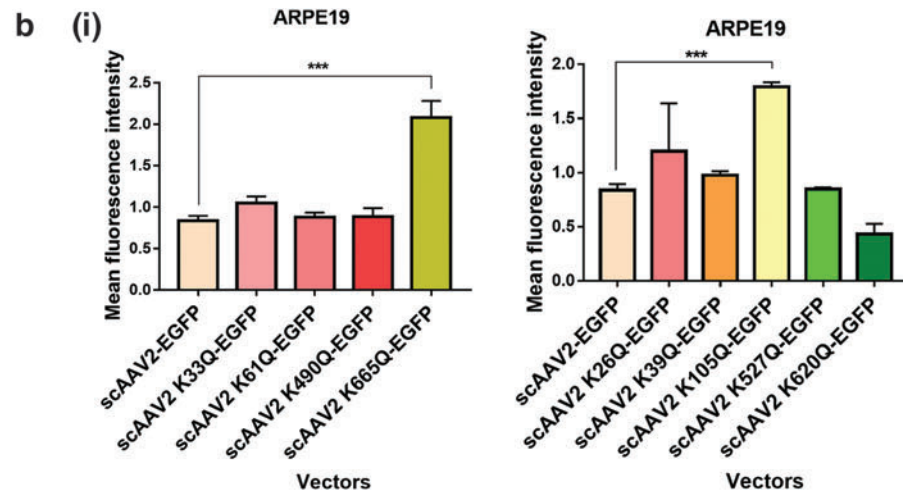
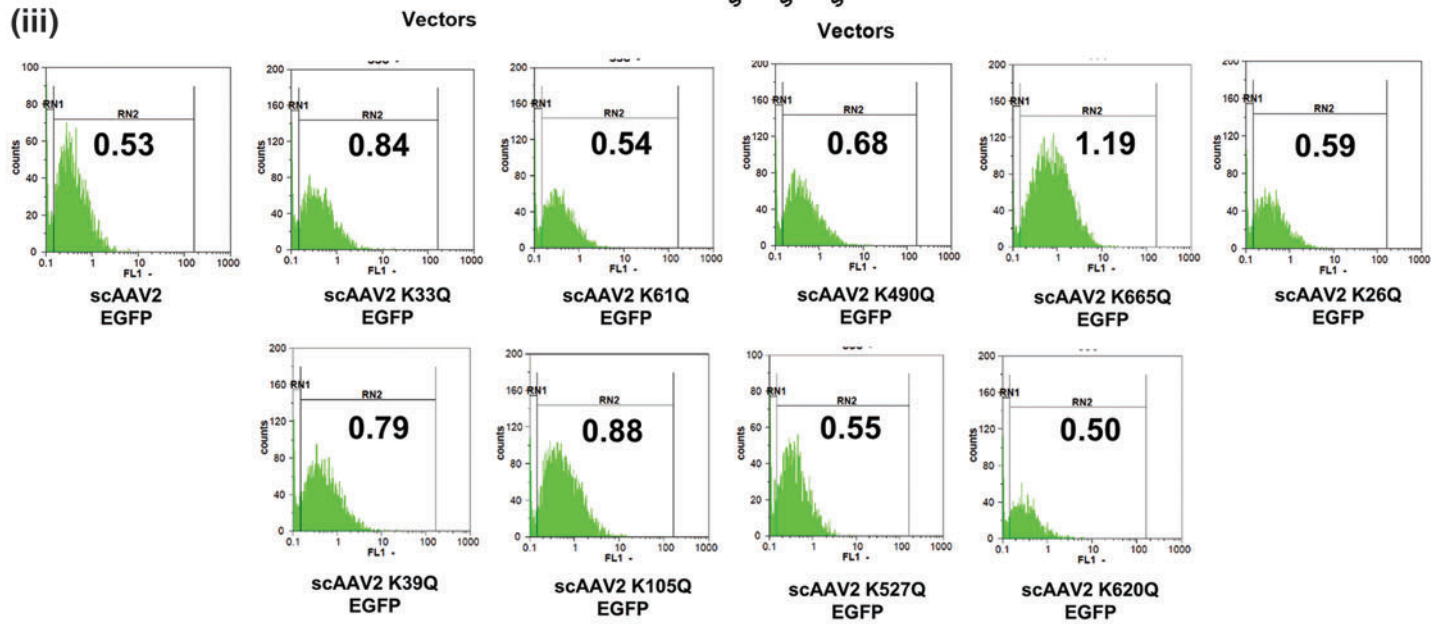
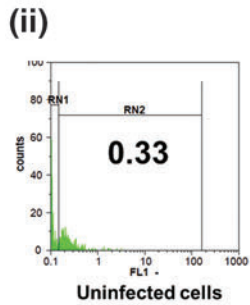
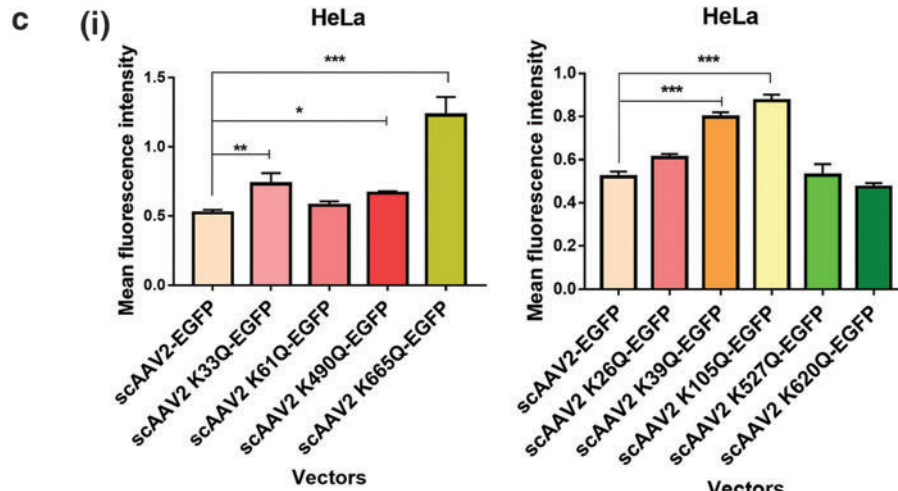


**Supplementary Figure S3.** MFI of AAV2 mutant vectors *in vitro*. The MFI for Neddyltion or SUMOylation target-site mutants was quantified by flow cytometry (CyFlow, Sysmex-Partec, Kobe, HP, Japan) (i) and representative histograms (ii, iii) in Huh7 cells (a), ARPE-19 (b), or HeLa cells (c) are shown. scAAV2-EGFP control was shared between Neddyltion and SUMOylation mutants. Dunnett's multiple comparisons test was used to determine the statistical significance. Data are expressed as mean  $\pm$  SD,  $n=4$ , \* $p \leq 0.05$ , \*\* $p \leq 0.01$ , \*\*\* $p \leq 0.001$ . Data presented are a representative set from two independent biological replicate analysis. MFI values on the histogram (ii, iii) have been manually shown for one replicate sample from entire analysis. The histogram plot shown here is similar to Fig. 1 that demonstrated the % GFP positivity for the same sample. MFI, mean fluorescence intensity.



Uninfected cells

Vector infected cells



Uninfected cells

Vector infected cells