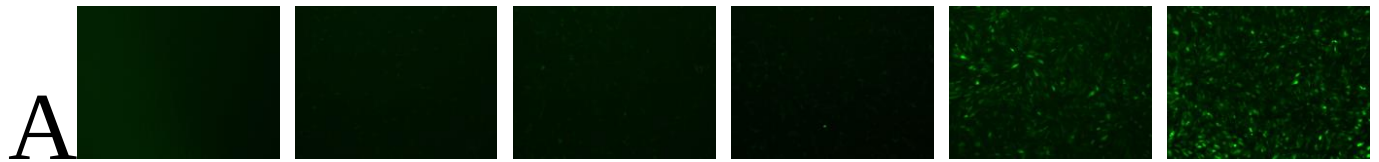
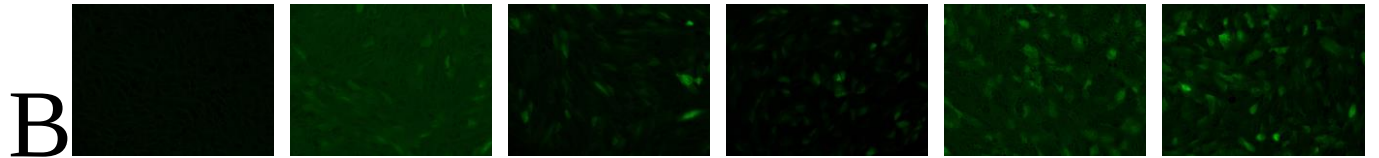


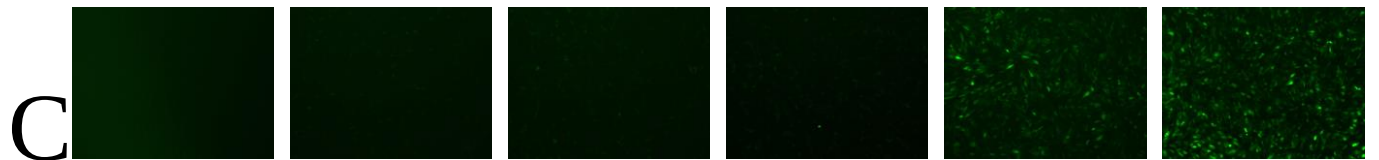
Supplementary Material 1: Pictures of the results under fluorescence microscopy after lentiviral infection at different times and different MOI values



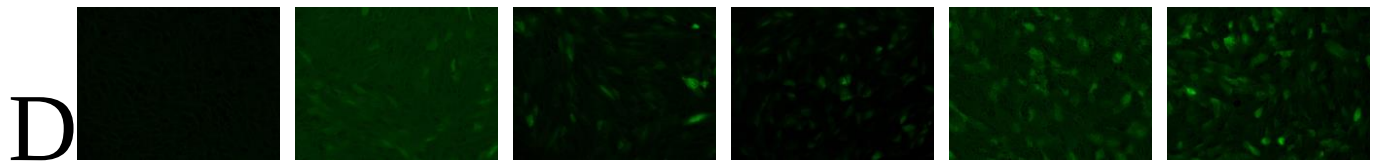
Fluorescence intensity observed under a 40x microscope 24h after lentiviral infection, from left to right, MOI=0,2.5,5,10,20,40



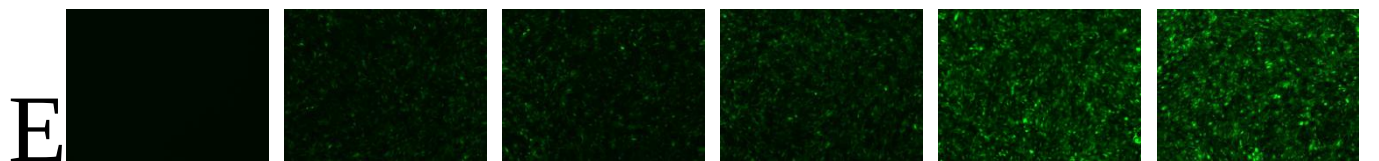
Fluorescence intensity observed under a 400x microscope 24h after lentiviral infection, from left to right, MOI=0,2.5,5,10,20,40



Fluorescence intensity observed under a 40x microscope 48h after lentiviral infection, from left to right, MOI=0,2.5,5,10,20,40

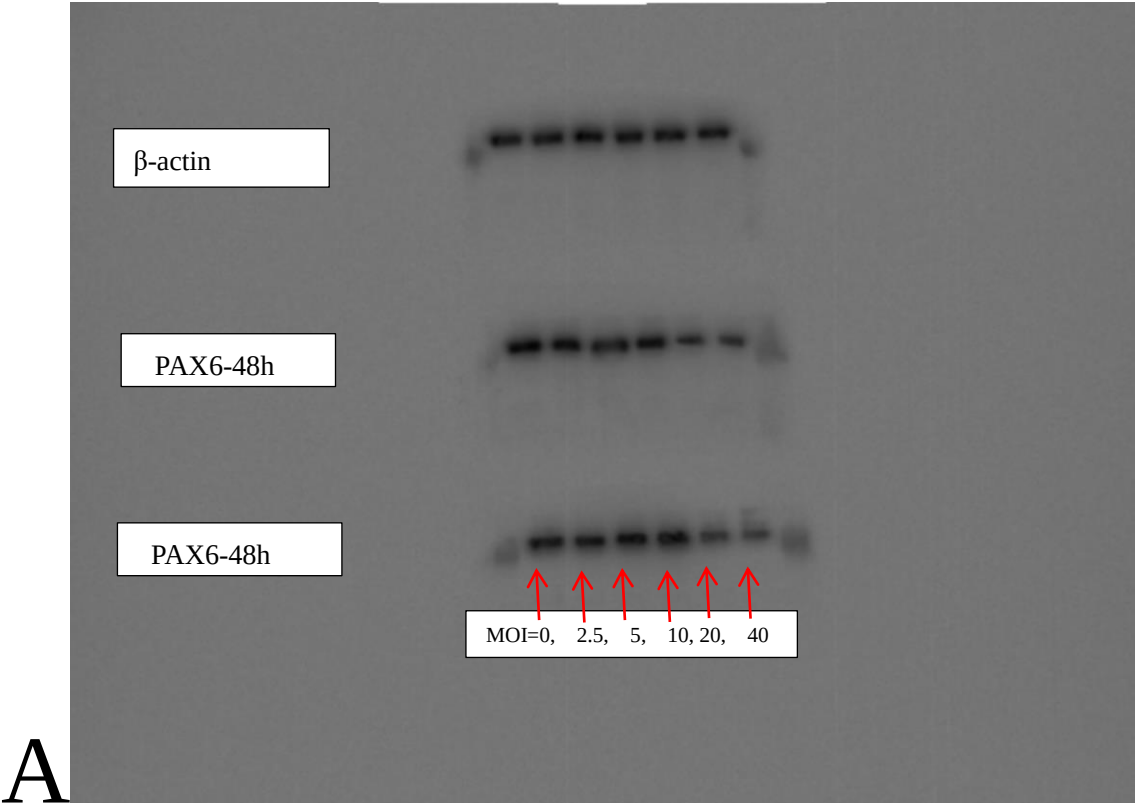


Fluorescence intensity observed under a 400x microscope 48h after lentiviral infection, from left to right, MOI=0,2.5,5,10,20,40



Fluorescence intensity observed under a 40x microscope 72h after lentiviral infection, from left to right, MOI=0,2.5,5,10,20,40

Supplementary Material 2: Western blot detection of PAX6 protein expression.



Western blot detection of PAX6 protein expression after lentivirus infection of ARPE-19 cells at different MOI values for 48h.



Western blot detection of PAX6 protein expression after lentivirus infection of ARPE-19 cells at MOI=20 for 48h.

Supplementary Material 3: Wnt2 protein expression



Raw gel results of Wnt2 protein expression, from left to right lanes are Control, NC, PAX6-shRNA, XAV-939 and cassia polysaccharide, A) Wnt2 protein band, B) β-actin protein band.

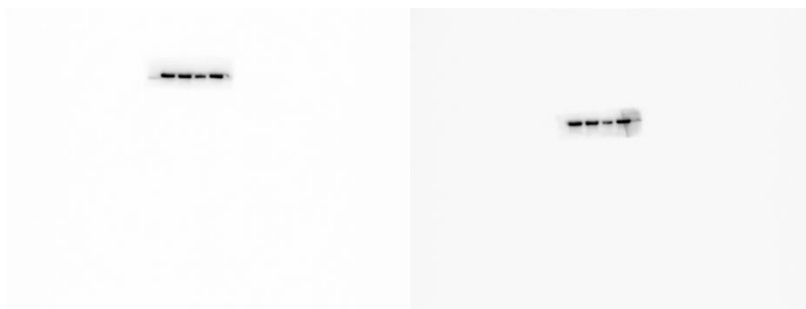
Supplementary Material 4: β-catenin protein expression



Raw gel results of β-catenin protein expression, from left to right lanes are Control, NC, PAX6-shRNA, XAV-939 and cassia polysaccharide, A) β-catenin protein band, B) β-actin protein band.

Supplementary Material 5: COL1A1,MMP-2,TGF- β protein expression

A



B



C



D



Raw gel results of COL1A1,MMP-2,TGF- β protein expression, from left to right lanes are Control, NC, PAX6-shRNA and cassia polysaccharide, A)COL1A1 protein band, B)MMP-2 protein band, C)TGF- β protein band and D) β -actin protein band.

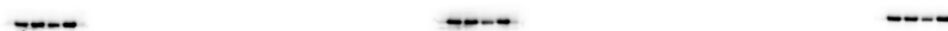
Supplementary Material 6: cyclin D and PCNA protein expression



Raw gel results of cyclin D and PCNA protein expression, from left to right lanes are Control, NC, PAX6-shRNA and cassia polysaccharide, A) cyclin D protein band, B) PCNA protein band and C) β -actin protein band.

Supplementary Material 7: PI3K, AKT and P27 protein expression

A



B



C



D



Raw gel results of PI3K, AKT and P27 protein expression, from left to right lanes are Control, NC, PAX6-shRNA and cassia polysaccharide, A) PI3K protein band, B)AKT protein band, C)P27 protein band and D)GAPDH protein band.