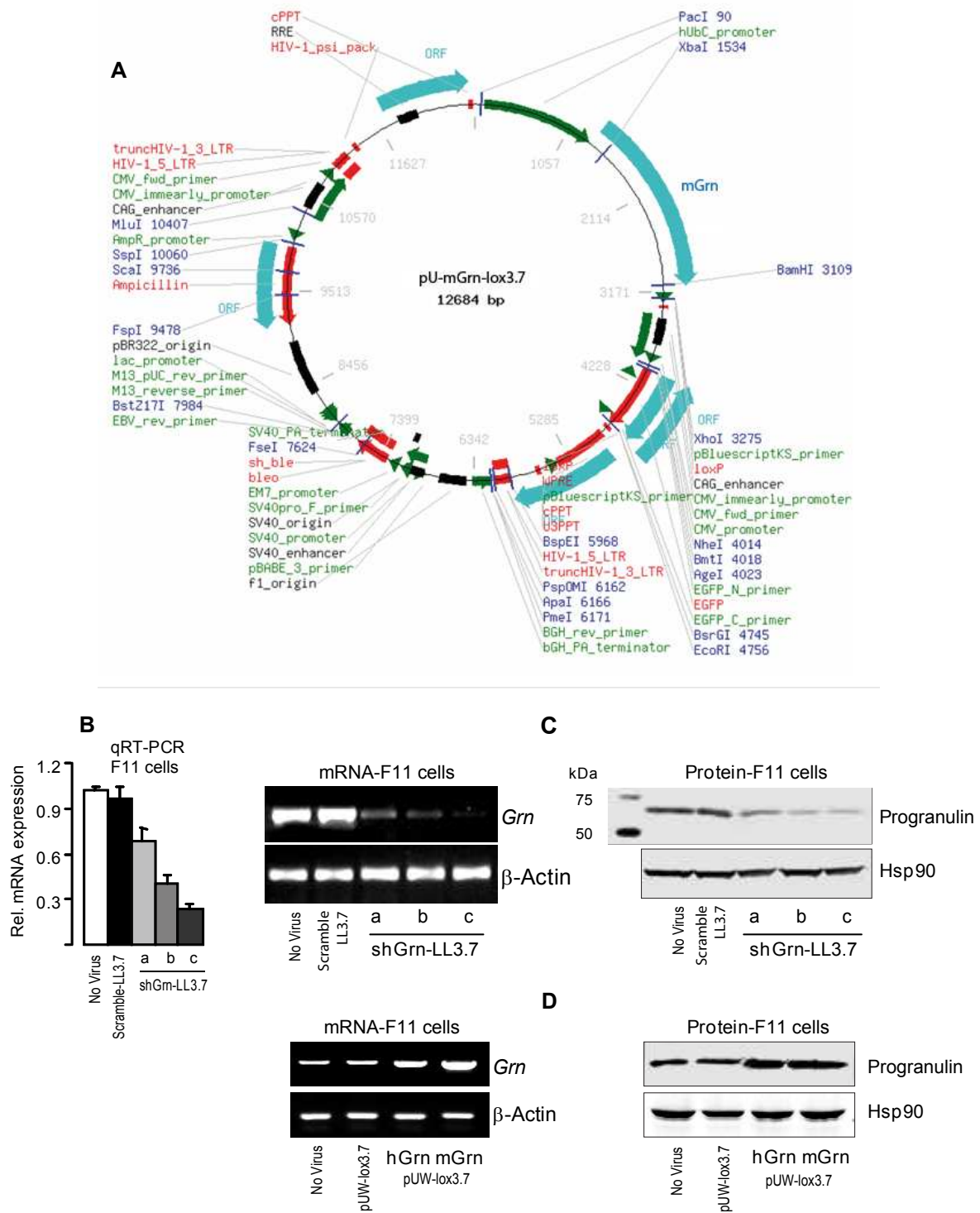


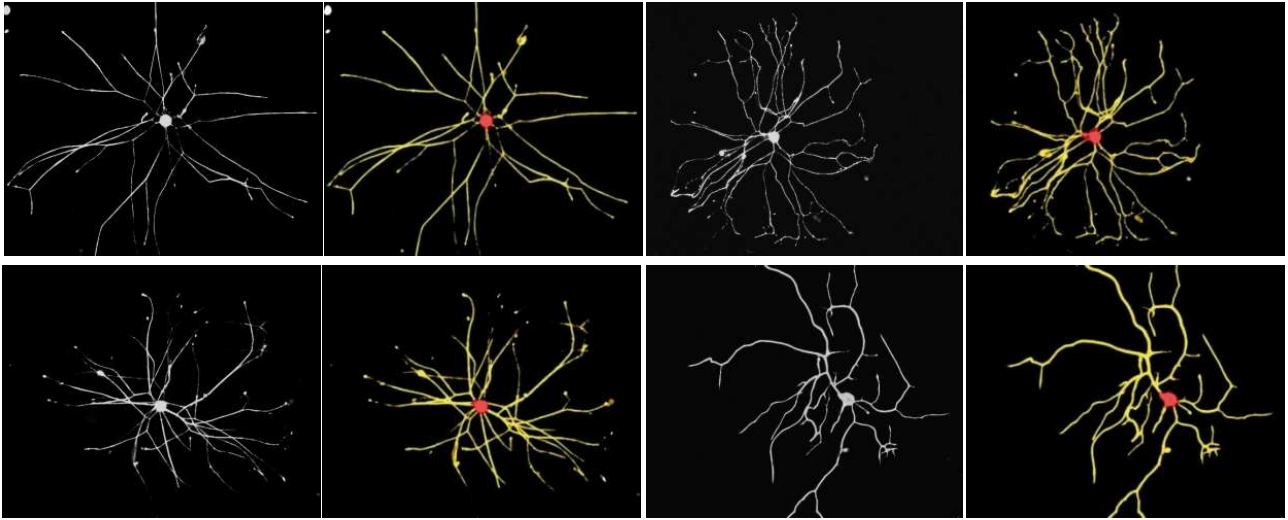
# Suppl. Fig 1



Suppl. Figure 1A: Schematic diagram of the modified lentiviral vector, pLL-3.7 used for overexpression of progranulin. The ubiquitin promoter-MCS (multiple cloning site) cassette was inserted in frame 5' upstream of the U6 promoter of pLL-3.7 via *SpeI* and *XhoI* sites.

B-D: Lentivirus mediated progranulin silencing and stable overexpression in vitro. C Progranulin mRNA and protein expression in F11 cells transduced with control scramble-shRNA-pLL-3.7 and three different shGrn-LL3.7 progranulin silencing vectors. D Stable lentivirus-mediated overexpression of human (hGrn) and mouse progranulin (mGrn) mRNA and protein in F11 cells. F11 cells transduced with "empty" lentiviruses without progranulin (pUW-lox3.7) served as controls. Bacta-actin and Hsp90 were used for normalization.

## Suppl. Fig 2



### Suppl. Fig. 2

Representative images showing the automated identification of neurites (yellow) and neuronal body (red) from which neurite area, total length, number of central neurites, neurite thickness, and area, diameter and circumference of the soma were calculated. The black and white figures show the original image of the NF200 immunofluorescent neuron captured on a fluorescent microscope with a 20x objective lens. The yellow and red figures show the image generated by the analysis software.