Interference fragment	Direction	Sequence (5'-3')
LM-ShRNA-1	F	GATCCTGCAGAAGATGGCCAGTATTTCAAGAGAATACTGGCCATCTTCTGCATTTTTTG
	R	AATTCAAAAAATGCAGAAGATGGCCAGTATTCTCTTGAAATACTGGCCATCTTCTGCAG
LM-ShRNA-2-3	F	GATCCGGAAAGAACAATGTGCCAAGATTCAAGAGATCTTGGCACATTGTTCTTTCCTTTTTTG
	R	AATTCAAAAAAGGAAAGAACAATGTGCCAAGATCTCTTGAATCTTGGCACATTGTTCTTTCCG
LM-ShRNA-3-4	F	GATCCGGAAGTCATCGATACAGAACATTCAAGAGATGTTCTGTATCGATGACTTCCTTTTTTG
	R	AATTCAAAAAAGGAAGTCATCGATACAGAACATCTCTTGAATGTTCTGTATCGATGACTTCCG

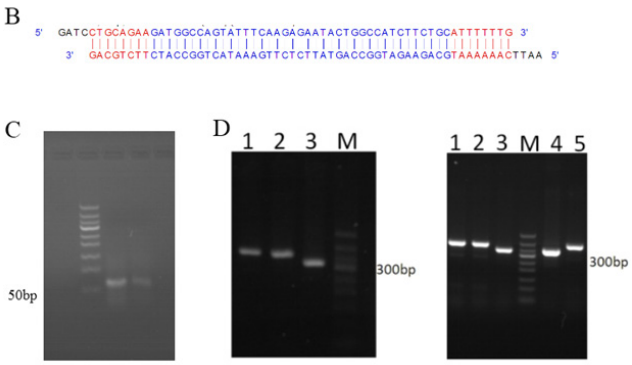

Figure S1. Construction of Sema3A interference vector. (A) The sequence of the interference fragment was designed based on accession number NM_017310 of Sema 3A gene in NCBI gene bank. (B) The complementarities of the designed shRNA fragments. (C) Annealing determination of shRNA by 2% agarose gel electrophoresis. (D) PCR results of bacterial solution of shRNA vector. The left image shows the PCR results of the bacterial solution for No.1 interference vector: 1 and 2 represent the recombinant interference plasmids and 3 represent empty plasmids. The right image shows the PCR results of the bacterial solution for No.2 and 3 interference vector: 2 and 5 represent the recombinant interference plasmids and 3, 4 represent empty plasmids.

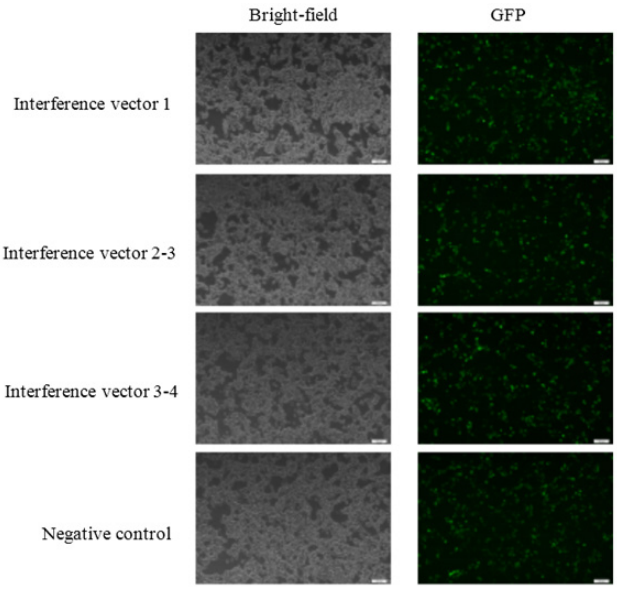

Figure S2. Results of virus packaging. Transfections were performed using the liposome of lipofectamine 2000. High fluorescence intensity of cells indicated the successful packaging of virus.

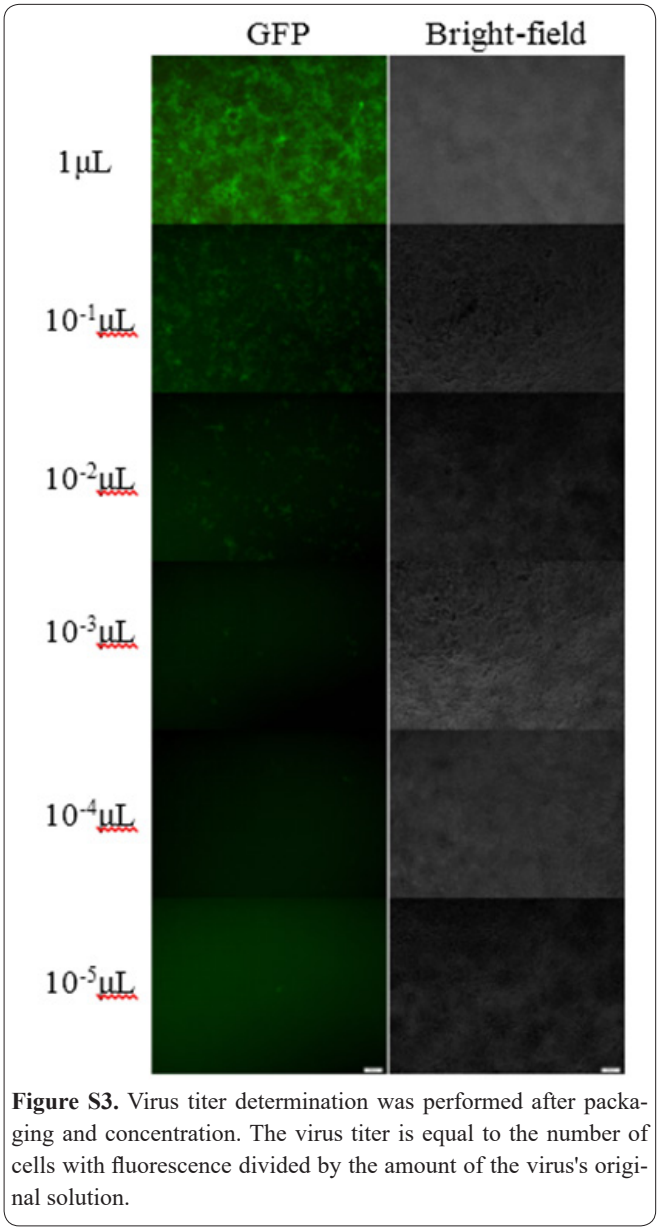

Figure S3. Virus titer determination was performed after packaging and concentration. The virus titer is equal to the number of cells with fluorescence divided by the amount of the virus's original solution.

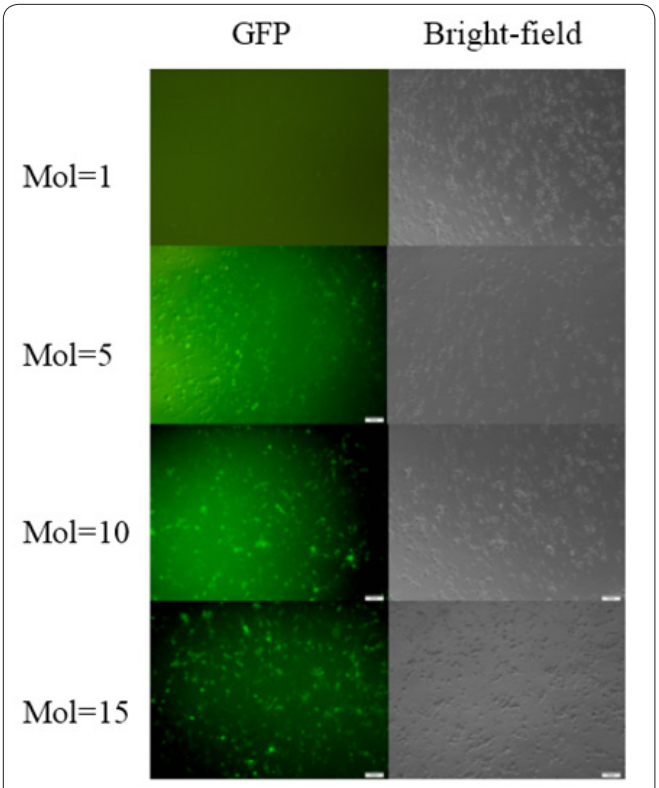

Figure S4. Determination of multiplicity of neuronal infection.